

1	5	10	15
Leu Ala Thr Gln Ala Leu Arg Glu Asn Arg Arg Glu Glu Lys Glu Lys			
20	25	30	
Asn Ala Pro Pro Thr Ser Gln His Lys Ser Ser Phe Trp Pro Tyr Ser			
35	40	45	
Val Cys Thr Ile Ala Leu Pro Thr His Gly Ser Phe Asn Pro Glu Asp			
50	55	60	
Leu Gly Tyr Gln Ser Ala Met Val Phe Leu Cys Leu Arg Val Val Val			
65	70	75	80
Leu Gly Gly Gly Lys Val Ala Arg Ser Asp Thr Leu Gln Ser Gly Pro			
85	90	95	
Phe Phe Phe Leu Ser Leu Ser Leu Thr His Thr Arg Ala His Val His			
100	105	110	
Thr His Thr Arg Ala Ser Leu Ile Phe Leu Leu Val Arg Thr His			
115	120	125	

<210> 1243

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1243

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ntagactccg tcgatcccct catggagaat ccagtgtgcc aggtcccttc ggcgtactgg
60
gagatgatat acctaccggg aatgttcact gtctacttcg atggccagtt ctgggtcgga
120
gtcctagaga ggcgcgacga gggtttggtg cgtgccgtaa aagtcacgtt tggcgccgaa
180
ccgtctgaca cggaattgta cgggtggggt agccgtcatg gcaacgcact tatagagcga
240
ttggagtcta ccgctgctgt ccctaccacc cgcagtcgcc gagccaagcg actgaacccc
300
aagagggcgt tacgagatgc agcgcgagct gcccaagcac accgtgccag cacgnccgca
360
caggccgcga ttaaggccga tcaggaagct
390

```

<210> 1244

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1244

Xaa Asp Ser Val Asp Pro Leu Met Glu Asn Pro Val Cys Gln Val Pro			
1	5	10	15
Ser Ala Tyr Trp Glu Met Ile Tyr Leu Pro Gly Met Phe Thr Val Tyr			
20	25	30	
Phe Asp Gly Gln Phe Trp Val Gly Val Leu Glu Arg Arg Asp Glu Gly			
35	40	45	
Leu Val Arg Ala Val Lys Val Thr Phe Gly Ala Glu Pro Ser Asp Thr			
50	55	60	
Glu Leu Tyr Gly Trp Val Ser Arg His Gly Asn Ala Leu Ile Glu Arg			
65	70	75	80
Leu Glu Ser Thr Ala Ala Val Pro Thr Thr Arg Ser Pro Arg Ala Lys			

```

      85              90              95
Arg Leu Asn Pro Lys Arg Ala Leu Arg Asp Ala Ala Arg Ala Ala Gln
      100              105              110
Ala His Arg Ala Ser Thr Xaa Ala Gln Ala Ala Ile Lys Ala Asp Gln
      115              120              125
Glu Ala
      130

```

<210> 1245

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1245

```

gccaagcagc aaaaaccaca gatcattgct atgggaaatg tgtcattttc ttgttcacaa
60
ccacaatcta tgcccgtgac ttttctgagc tccaggagtt ttttagcact gccagacttc
120
tctggagagg aggagggtttc tgccactttt caatttcgaa cttggaataa ggcagggctt
180
ctgctgttca gtgaacttca gctgatttca gggggtatcc tcctctttct gagtgatgga
240
aaacttaagt cgaatctcta ccagccaaga aaattaccca gtgacatcac agcaggtgtc
300
gaattaaatg atgggcagtg gcattctgtc tctttatct
339

```

<210> 1246

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1246

```

Ala Lys Gln Gln Lys Pro Gln Ile Ile Ala Met Gly Asn Val Ser Phe
 1          5          10          15
Ser Cys Ser Gln Pro Gln Ser Met Pro Val Thr Phe Leu Ser Ser Arg
      20          25          30
Ser Phe Leu Ala Leu Pro Asp Phe Ser Gly Glu Glu Glu Val Ser Ala
      35          40          45
Thr Phe Gln Phe Arg Thr Trp Asn Lys Ala Gly Leu Leu Leu Phe Ser
      50          55          60
Glu Leu Gln Leu Ile Ser Gly Gly Ile Leu Leu Phe Leu Ser Asp Gly
65          70          75          80
Lys Leu Lys Ser Asn Leu Tyr Gln Pro Arg Lys Leu Pro Ser Asp Ile
      85          90          95
Thr Ala Gly Val Glu Leu Asn Asp Gly Gln Trp His Ser Val Ser Leu
      100          105          110
Ser

```

<210> 1247

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1247

ttgacctcca acccgggcac gcgcatcctg cccagatcc cgatggatgg gcatgacctc
 60
 aacccgggtgt ggcgggacgt cggcctgata gtgcacccgc cgatgctcta catgggctac
 120
 gtcggtttct ccgtggcctt tgcgtttgcc atcgccgctt tgctcggcgg gcgcctcgat
 180
 gcggcctggg cgcgctggtc gcggccatgg accattgtgg cctgggcgtt cctcggtatc
 240
 ggtatcacc ctcggttcgtg gtgggcctac tacgaactcg gctggngcgg ctggtggttc
 300
 tgggaccccg gggaaaaccc cttcttcata ccctggctgg ggggcacccc gctgattcac
 360
 tcgctg
 366

<210> 1248

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1248

Leu	Thr	Ser	Asn	Pro	Gly	Thr	Arg	Ile	Leu	Pro	Gln	Ile	Pro	Met	Asp
1				5					10					15	
Gly	His	Asp	Leu	Asn	Pro	Val	Trp	Arg	Asp	Val	Gly	Leu	Ile	Val	His
			20					25				30			
Pro	Pro	Met	Leu	Tyr	Met	Gly	Tyr	Val	Gly	Phe	Ser	Val	Ala	Phe	Ala
		35				40					45				
Phe	Ala	Ile	Ala	Ala	Leu	Leu	Gly	Gly	Arg	Leu	Asp	Ala	Ala	Trp	Ala
	50				55				60						
Arg	Trp	Ser	Arg	Pro	Trp	Thr	Ile	Val	Ala	Trp	Ala	Phe	Leu	Gly	Ile
65				70					75				80		
Gly	Ile	Thr	Leu	Gly	Ser	Trp	Trp	Ala	Tyr	Tyr	Glu	Leu	Gly	Trp	Xaa
			85					90					95		
Gly	Trp	Trp	Phe	Trp	Asp	Pro	Gly	Glu	Asn	Pro	Phe	Phe	Met	Pro	Trp
			100				105						110		
Leu	Gly	Gly	Thr	Pro	Leu	Ile	His	Ser	Leu						
		115				120									

<210> 1249

<211> 374

<212> DNA

<213> Homo sapiens

<400> 1249

acgcgtgtcc tcaacaccct ggcgcccacg ctgattgccg tggaaccggt gccggcaatg
 60
 ggcgcgacgt tgagcaagct gctgccggat gtgcacctgg tcaatggcac tgccgaggcc
 120
 attccactgg aaagcgccgt ggcggatgcg gtggtgtgcg cacaagcctt ccattggttt
 180
 tccagcgagg cgccctggc ggaaatccat cgggtactca aaccggatgg gcgcctgggg
 240

ctggtgtgga atgtgcgcga cgagtcggtg gattgggtcg ccgccattac tcaaattcatc
 300
 acgccttatg aaggcgacac gccgcgcttt cataccggcc gttggcgoga agccttcact
 360
 ggcgagtatt ttg
 374

<210> 1250
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1250
 Thr Arg Val Leu Asn Thr Leu Ala Pro Thr Leu Ile Ala Val Glu Pro
 1 5 10 15
 Val Pro Ala Met Gly Ala Gln Leu Ser Lys Leu Leu Pro Asp Val His
 20 25 30
 Leu Val Asn Gly Thr Ala Glu Ala Ile Pro Leu Glu Ser Ala Val Ala
 35 40 45
 Asp Ala Val Val Cys Ala Gln Ala Phe His Trp Phe Ser Ser Glu Ala
 50 55 60
 Ala Leu Ala Glu Ile His Arg Val Leu Lys Pro Asp Gly Arg Leu Gly
 65 70 75 80
 Leu Val Trp Asn Val Arg Asp Glu Ser Val Asp Trp Val Ala Ala Ile
 85 90 95
 Thr Gln Ile Ile Thr Pro Tyr Glu Gly Asp Thr Pro Arg Phe His Thr
 100 105 110
 Gly Arg Trp Arg Glu Ala Phe Thr Gly Glu Tyr Phe
 115 120

<210> 1251
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 1251
 accggtctct tcctcgga aa ggcagggccg aggggcttgc ggggcagcca tggaggcgac
 60
 gcggaggcgg cagcacgtgg gagcgacggg cggcccaggc gcgcagttgg gcgcctcctt
 120
 ccctgcaggc caggcatggc tctgtgagcg ctgatgaggc tgcccgcacg gctcccttcc
 180
 acctcgacct ctggttctac ttcacactgc agaactgggt tctggacttt gggcgtccca
 240
 ttgccatgct ggtattccct ctcgagtggg ttccactcaa caagcccagt gttggggact
 300
 acttccacat ggcctacaac gtcatacgc cctttctctt gctcaagctc atcgagcggg
 360
 cccccgcac cctgctacgc tccatcacgt acgtgagcat catcatcttc atcatgggtg
 420
 ccagcatcca cctgggtgggt gactctgtca accaccgct gctcttcagt ggctaccagc
 480
 accacctgtc tgtccgtgag aaccccatca tcaagaatct caagccggag acgctgatcg
 540

actcctttga gctgctctac tattatgatg agtacctggg tcaactgcatg tggtagatcc
 600
 ccttcttctc catcctcttc atgtacttca gcggctgctn ttactgcctc taaagctgag
 660
 agcttgatcc cagggcctgc cctgctcctg gtggcaccca gtggcctgta ctactggtac
 720
 ctggtcaccg agggccagat ct
 742

<210> 1252

<211> 80

<212> PRT

<213> Homo sapiens

<400> 1252

Met	Arg	Leu	Pro	Ala	Arg	Leu	Pro	Ser	Thr	Ser	Thr	Ser	Gly	Ser	Thr
1				5				10					15		
Ser	His	Cys	Arg	Thr	Gly	Phe	Trp	Thr	Leu	Gly	Val	Pro	Leu	Pro	Cys
			20				25					30			
Trp	Tyr	Ser	Leu	Ser	Ser	Gly	Phe	His	Ser	Thr	Ser	Pro	Val	Leu	Gly
		35				40					45				
Thr	Thr	Ser	Thr	Trp	Pro	Thr	Ser	Ser	Arg	Pro	Phe	Ser	Cys	Ser	
	50					55			60						
Ser	Ser	Ser	Ser	Gly	Pro	Pro	Ala	Pro	Cys	Tyr	Ala	Pro	Ser	Arg	Thr
65				70				75						80	

<210> 1253

<211> 675

<212> DNA

<213> Homo sapiens

<400> 1253

gggccccctc ccaggcgctt tctgggagct tttagaactg cgctctgaag tttccagaga
 60
 gcgaggagct tttgcggcag gcagagacaa tggaagaaaa tgaaagccag aaatgtgagc
 120
 cgtgccttcc ttactcagca gacagaagac agatgcagga acaaggcaaa ggcaatctgc
 180
 atgtaacatc accagaagat gcagaatgcc gcagaaccaa ggaacgcctt tctaattggaa
 240
 acagtcgtgg ttcagtttcc aagtcttccc gcaatatccc aaggagacac accctagggg
 300
 ggccccgaag ttccaaggaa atactgggaa tgcaaacatc tgagatggat cggaagagag
 360
 gaaaaagcgt tcctagaaca tctgaagcag aagtaccccc accacgcctc tgcaatcatg
 420
 ggtcaccaag agaggctgag agaccagaca aggatcccca aactgtctca cagtccctcaa
 480
 ccacccagtg tgggtgaccc ggtcgagcat ttatcagaga cgcccgctga ttctttggaa
 540
 gccatgtctg aggggggatgc tccaaccctt tttccagag gcagccggac tcgtgcgagc
 600
 cttcctgtgg tgaggtcaac caaccagacg aaagaaagat ctctgggggt tctctatctc
 660

cagtatggag atgaa
675

<210> 1254
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1254
Met Gly His Gln Glu Arg Leu Arg Asp Gln Thr Arg Ile Pro Lys Leu
1 5 10 15
Ser His Ser Pro Gln Pro Pro Ser Val Gly Asp Pro Val Glu His Leu
20 25 30
Ser Glu Thr Ser Ala Asp Ser Leu Glu Ala Met Ser Glu Gly Asp Ala
35 40 45
Pro Thr Pro Phe Ser Arg Gly Ser Arg Thr Arg Ala Ser Leu Pro Val
50 55 60
Val Arg Ser Thr Asn Gln Thr Lys Glu Arg Ser Leu Gly Val Leu Tyr
65 70 75 80
Leu Gln Tyr Gly Asp Glu
85

<210> 1255
<211> 401
<212> DNA
<213> Homo sapiens

<400> 1255
ncgccgatta ccaaggctat ggatgtgtgg gccttgggag taacgctata ctgtctgctg
60
ttcggtcgag tgccatttga tgcagagacg gagtacttgc tgctggaaag taccctgcat
120
gacgattatg ccgtcccgac gcacatgggt agcgaccgag tgttggtagg cccgcgacca
180
gcacgttggc cctcgtcgca agagacgccc aacgtgccgc tgtccggcga ggcgcatgca
240
gtacgccatc tgctcgatgc ccttctcgac aaggatccag cgacgcgcct cactctcgat
300
cgtgttataa cacacccatg gctcgtggca gagtcatggg aatagtagca attgtatata
360
ccctcatcac caagatggcc aaagcggtag aaggcccgcg g
401

<210> 1256
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1256
Xaa Pro Ile Thr Lys Ala Met Asp Val Trp Ala Leu Gly Val Thr Leu
1 5 10 15
Tyr Cys Leu Leu Phe Gly Arg Val Pro Phe Asp Ala Glu Thr Glu Tyr
20 25 30
Leu Leu Leu Glu Ser Ile Leu His Asp Asp Tyr Ala Val Pro Thr His

```

      35              40              45
Met Gly Ser Asp Arg Val Leu Val Gly Pro Arg Pro Ala Arg Trp Pro
   50              55              60
Ser Ser Gln Glu Thr Pro Asn Val Pro Leu Ser Gly Glu Ala His Ala
65              70              75              80
Val Arg His Leu Leu Asp Ala Leu Leu Asp Lys Asp Pro Ala Thr Arg
      85              90              95
Leu Thr Leu Asp Arg Val Ile Thr His Pro Trp Leu Val Ala Glu Ser
   100              105              110
Trp

```

<210> 1257
 <211> 294
 <212> DNA
 <213> Homo sapiens

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<400> 1257
cgcggtacagc tgattgaagg tgatgtcgcc aacgccgacc tgggtggcgca agccgccatc
60
ggcgccacagg cggtggtgca tttggcagcg gtggcttcgg tgcaagcctc ggtggatgac
120
ccggtcagca cgcgccagag caattttgtc ggcaccttga atgtctgcga agccatgcgc
180
aaggccggtg tgaagcgtgt ggattttgct tccagcgttg cggtgtatgg caacaatggc
240
gagggcgctt cgattgacga agagaccatc aaggccccgc tgacgcctta cgcg
294

```

<210> 1258
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 1258
Arg Val Gln Leu Ile Glu Gly Asp Val Ala Asn Ala Asp Leu Val Ala
 1              5              10              15
Gln Ala Ala Ile Gly Ala Thr Ala Val Val His Leu Ala Ala Val Ala
   20              25              30
Ser Val Gln Ala Ser Val Asp Asp Pro Val Ser Thr Arg Gln Ser Asn
   35              40              45
Phe Val Gly Thr Leu Asn Val Cys Glu Ala Met Arg Lys Ala Gly Val
   50              55              60
Lys Arg Val Val Phe Ala Ser Ser Val Ala Val Tyr Gly Asn Asn Gly
65              70              75              80
Glu Gly Ala Ser Ile Asp Glu Glu Thr Ile Lys Ala Pro Leu Thr Pro
      85              90              95
Tyr Ala

```

<210> 1259
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 1259

nnacactcta gcctctgact caaggaagct gcccagggtc ttgcccttcg gtttgggggg
60
atcccgtctc ccttcgtctg gagcagacat agtgagaacg tgagaagctg caggcgtggc
120
ctcaccgtgg tgtgttccaa gatgtccagg gccaaaggatg ccgtgtcctc cgggggtggcc
180
agcgtgggtg acgtggctaa gggagtggtc caggaggaggc tggacaccac tcggtctgca
240
cttacgggca ccaaggaggc ggtgtccagc ggggtcacag gggccatgga catggctaag
300
ggggccgtcc aaggggggtct ggacacctcg aaggctgtcc tcaccggcac caaggacacg
360
gtgtccactg ggctcacggg ggcagtgaat gtggccaaag ggcccgtaca ggccggc
417

<210> 1260

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1260

Leu	Lys	Glu	Ala	Ala	Gln	Gly	Leu	Ala	Leu	Arg	Phe	Gly	Gly	Ile	Pro
1				5					10					15	
Ser	Pro	Phe	Val	Trp	Ser	Arg	His	Ser	Glu	Asn	Val	Arg	Ser	Cys	Arg
			20					25					30		
Arg	Gly	Leu	Thr	Val	Val	Cys	Ser	Lys	Met	Ser	Arg	Ala	Lys	Asp	Ala
		35					40					45			
Val	Ser	Ser	Gly	Val	Ala	Ser	Val	Val	Asp	Val	Ala	Lys	Gly	Val	Val
	50					55				60					
Gln	Gly	Gly	Leu	Asp	Thr	Arg	Ser	Ala	Leu	Thr	Gly	Thr	Lys	Glu	
65				70				75					80		
Ala	Val	Ser	Ser	Gly	Val	Thr	Gly	Ala	Met	Asp	Met	Ala	Lys	Gly	Ala
			85					90					95		
Val	Gln	Gly	Gly	Leu	Asp	Thr	Ser	Lys	Ala	Val	Leu	Thr	Gly	Thr	Lys
		100					105						110		
Asp	Thr	Val	Ser	Thr	Gly	Leu	Thr	Gly	Ala	Val	Asn	Val	Ala	Lys	Gly
	115					120						125			
Pro	Val	Gln	Ala	Gly											
		130													

<210> 1261

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1261

ngtgcacgtg ccgttcggca tcaggagatg aacatggatt tgaacgctga agtcgatcag
60
ctggctcggc aatcccagac ctggatcccc ttgatcatgg agtacggcag ccgcctgctg
120tgaccctggc ggtcggctgg tggatcgaca acaaggtcag cgcccgcctg 180
ggcaaactgg taggcctgcg caacgccgac ctggcactgc aaggctttat cagcaccttg
240

tcgaacatcg ggctgaaagt gctgctgttc gtcagtgtgg cgtcgatgat cggcattgag
300

accacctcgt tcgtcgcgga catcggtgct
330

<210> 1262

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1262

Xaa	Ala	Arg	Ala	Val	Arg	His	Gln	Glu	Met	Asn	Met	Asp	Leu	Asn	Ala
1				5					10					15	
Glu	Val	Asp	Gln	Leu	Val	Arg	Gln	Ser	Gln	Thr	Trp	Ile	Pro	Leu	Ile
			20					25					30		
Met	Glu	Tyr	Gly	Ser	Arg	Leu	Leu	Leu	Ala	Leu	Leu	Thr	Leu	Ala	Val
		35					40					45			
Gly	Trp	Trp	Ile	Asp	Asn	Lys	Val	Ser	Ala	Arg	Leu	Gly	Lys	Leu	Val
	50					55					60				
Gly	Leu	Arg	Asn	Ala	Asp	Leu	Ala	Leu	Gln	Gly	Phe	Ile	Ser	Thr	Leu
65				70						75				80	
Ser	Asn	Ile	Gly	Leu	Lys	Val	Leu	Leu	Phe	Val	Ser	Val	Ala	Ser	Met
			85						90					95	
Ile	Gly	Ile	Glu	Thr	Thr	Ser	Phe	Val	Ala	Asp	Ile	Gly	Ala		
			100					105						110	

<210> 1263

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1263

acgcgtggac gatggacttc gtcggtctgc ggtacgacga agggctcaac attgccggtg
60
gcatacgatga tgagtttgct cgccctgggca acacctagca gcaatggcat cgatagtccc
120
tgcccagcct gtcatttc gacgacgatg gtcgccgggt tcagtttctt ctcgctccac
180
gtcaacagac cgtcaccgtg gttgacgatc tcgccggtgg aggcgtcctt gacgacgatc
240
tgcccacgcg ccagggaata catctcccca tccacccaaa agaacgcccc caagctgggc
300
atcttggtcca gcccgatgat cgagagggtt tcaacaagcg actcgggatc c
351

<210> 1264

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1264

Met	Pro	Ser	Leu	Gly	Ala	Phe	Phe	Trp	Val	Asp	Gly	Glu	Met	Tyr	Ser
1				5					10					15	
Leu	Ala	Arg	Gly	Gln	Ile	Val	Val	Lys	Asp	Ala	Ser	Thr	Gly	Glu	Ile

```

      20              25              30
Val Asn His Gly Asp Gly Leu Leu Thr Trp Ser Glu Lys Lys Leu Asn
      35              40              45
Pro Ala Thr Ile Val Val Glu Met Glu Gln Ala Gly Gln Gly Leu Ser
      50              55              60
Met Pro Leu Leu Leu Gly Val Ala Gln Ala Ser Lys Leu Ile Ile Asp
      65              70              75              80
Ala Thr Gly Asn Val Glu Pro Phe Val Val Pro Gln Thr Asp Glu Val
      85              90              95
His Arg Pro Arg
      100

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<210> 1265
 <211> 318
 <212> DNA
 <213> Homo sapiens

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<400> 1265
accggtgtat gcaactgaaa tgctgtccga tatgcctgcg ctccagctcg tgaatcgaaa
60
gttgataaac gctcgcttgg tggaatcgct gctacggaag cttatcaagg atacggatgc
120
tgctgcaccg ccaaaattat ggacgcccc cgacccact cgctctgacg ataccattgc
180
acagccgaaa gtgcaaccag cccaagcagt gggagatgac tcgatcatgt cggtcgatga
240
gcctgatgca accgtccatg acatgccact caccacgaca ctcgacaacg tgggtcgctc
300
agatccatcg cgacgcgt
318

```

<210> 1266
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1266
Met Leu Ser Asp Met Pro Ala Leu Gln Leu Val Asn Arg Lys Leu Asp
1      5      10      15
Asn Ala Arg Leu Val Glu Ser Ser Leu Arg Lys Leu Ile Lys Asp Thr
      20      25      30
Asp Ala Ala Ala Pro Pro Lys Leu Trp Thr Pro Pro Asp Pro Thr Arg
      35      40      45
Ser Asp Asp Thr Ile Ala Gln Pro Lys Val Gln Pro Ala Gln Ala Val
      50      55      60
Gly Asp Asp Ser Ile Met Ser Val Asp Glu Pro Asp Ala Thr Val His
      65      70      75      80
Asp Met Pro Leu Thr Thr Leu Asp Asn Val Gly Arg Ser Asp Pro
      85      90      95
Ser Arg Arg

```

<210> 1267
 <211> 343

<212> DNA
 <213> Homo sapiens

<400> 1267
 nggacacttg tgggaaatgc cccacagcct gtgtttttat tccccttggtg aacacttggtg
 60
 ggaactgtcc cacggcccgt gtttctgtgc gcctgcagac actcgtggga aatgccccac
 120
 aacctgtgtt tttgttcccc ttgtgaacac tcgtgggaaa tgccccacaa cctgtgtttt
 180
 tattccccctt gtgaacactc gtgggaaatg tcccatggcc cgtgtttccg tgcacctgcg
 240
 gatactcatc aaacaccagg ctgtcattgg ggacagggtg agctctggct gttggtgcag
 300
 catggtagga agagcaccaa gtcctggact ctgttgattt ata
 343

<210> 1268
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1268
 Met Pro His Ser Leu Cys Phe Tyr Ser Pro Cys Glu His Leu Trp Glu
 1 5 10 15
 Leu Ser His Gly Pro Cys Phe Cys Ala Pro Ala Asp Thr Arg Gly Lys
 20 25 30
 Cys Pro Thr Thr Cys Val Phe Val Pro Leu Val Asn Thr Arg Gly Lys
 35 40 45
 Cys Pro Thr Thr Cys Val Phe Ile Pro Leu Val Asn Thr Arg Gly Lys
 50 55 60
 Cys Pro Met Ala Arg Val Ser Val His Leu Arg Ile Leu Ile Lys His
 65 70 75 80
 Gln Ala Val Ile Gly Asp Arg Val Ser Ser Gly Cys Trp Cys Ser Met
 85 90 95
 Val Gly Arg Ala Pro Ser Pro Gly Leu Cys
 100 105

<210> 1269
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1269
 tcgcatccg gagcgatcgg tgctgcagat ggctggcgac gccctgcggg gcgcattgcg
 60
 ggacgccgac ctggagccgg ccgccctaga cgggctgate gtccagggtg ggtccccccg
 120
 cggcgccgac tacgacaccg tgtccgaaac ctttgggtctt tcgccacaat tctgcagcca
 180
 gacctggggc gcacggccgg ttcaccgcaa cggatgacct ggcagcggcc atggcggtgt
 240
 ccagcggcct cgcgcggcgg gtggcttgcc tcatgggcat gaagaattcg gacctcgggc
 300

ggttgggtga ggcggaacaat ccctttcatc atgagcaatt ccgggagaat ggcgggccgc
360

acggggaaga gggttggatc ggcattgcct c
391

<210> 1270

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1270

Met	Met	Lys	Gly	Ile	Val	Arg	Leu	Thr	Gln	Pro	Pro	Glu,Val	Arg	Ile
1				5					10				15	
Leu	His	Ala	His	Glu	Ala	Ser	His	Pro	Pro	Arg	Glu	Ala	Ala	Gly
		20						25				30		His
Arg	His	Gly	Arg	Cys	Gln	Asp	His	Arg	Cys	Gly	Glu	Pro	Ala	Val
		35					40				45			Arg
Pro	Arg	Ser	Gly	Cys	Arg	Ile	Val	Ala	Lys	Asp	Gln	Arg	Phe	Arg
	50				55					60				Thr
Arg	Cys	Arg	Ser	Pro	Arg	Arg	Gly	Gly	Thr	Pro	Pro	Gly	Arg	Ser
65					70				75					80
Arg	Leu	Gly	Arg	Pro	Ala	Pro	Gly	Arg	Arg	Pro	Ala	Met	Arg	Pro
			85					90					95	Ala
Gly	Arg	Arg	Gln	Pro	Ser	Ala	Ala	Pro	Ile	Ala	Pro	Asp	Arg	
			100					105					110	

<210> 1271

<211> 661

<212> DNA

<213> Homo sapiens

<400> 1271

acgcgtcgtt actggccacc tgcgagcgca ccagggtagg cagcactcgg tctccgtcga
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accagaaagc gtcattcggg tggatgaacga gaacgggcca tggatgggtg ggacggataa
120
cccccggttg cgtcaccata tggccacta aagagttcac cagggttgat ttaccagccc
180
cggtcgaccc tcctaccacc gccagaagcg gcgcatcaat agtctctaag cgcggcaaaa
240
tatagtcgtt aagctgggta gcgatgcgtc gtgccagccc ggcttgagta atagcctccg
300
gcaaatccaa ggggaactgg gcctgacgca gggttgccg cagatcggc aacgacagca
360
gtatctgctc agtggttcatt gtgatccttc ctggctactc gtcaggcctg tggcggcgcc
420
cactgcaact cgttggtgac cggctgggtg cgacgtcgtt tgagggaatgc gggcagtcctc
480
ggcttcgaca atttggcacc tcgggcgacg gtgatagccg ccgggcgcag cacgttcata
540
cgggttgatga gtcgatctg aagcggacca ggatcatcgt ccaaccacg cacaatggcg
600
tcacgaagat aagcaagatc tgtcccaacg cgcaggaact ctaacgtgtg ccaccaccgg
660

t

661

<210> 1272

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1272

```

Met Asn Thr Glu Gln Ile Leu Leu Ser Leu Thr Asp Leu Arg His Asn
 1           5           10           15
Leu Arg Gln Ala Gln Phe Pro Leu Asp Leu Pro Glu Ala Ile Thr Gln
          20           25           30
Ala Gly Leu Ala Arg Arg Ile Ala Asn Gln Leu Asn Asp Tyr Ile Leu
          35           40           45
Pro Arg Leu Glu Thr Ile Asp Ala Pro Leu Leu Ala Val Val Gly Gly
          50           55           60
Ser Thr Gly Ala Gly Lys Ser Thr Leu Val Asn Ser Leu Val Gly His
65           70           75           80
Met Val Thr Gln Pro Gly Val Ile Arg Pro Thr Thr Thr Ser Pro Val
          85           90           95
Leu Val His His Pro Asp Asp Ala Phe Trp Phe Asp Gly Asp Arg Val
          100          105          110
Leu Pro Thr Leu Val Arg Ser Gln Val Ala Ser Asn Asp Ala
          115          120          125

```

<210> 1273

<211> 489

<212> DNA

<213> Homo sapiens

<400> 1273

```

gccggcgaga ccggtgccgg aaagaccatg gtggtcaccg gtattggttt gctgctcggc
60
gacaaggctg acactggatt ggtccggcat ggctgcgacg gtgccgtcgt cgaagccggt
120
ctcgacacgc ctgatgccgg tcgcgtcagc gagcttggcg gaacagtcga ggatgggtgag
180
gttatctgcg ctcgacacat cagagtcgt cgctctcgag cgctgcttgg aggagctcaa
240
gttaccgcta gtcagctggc ccacatcggt ggggatcagg tgaccatcca tggccaatct
300
gaacaagtga gggtggtcga cgcagcgagg cagctcgacg tcgttgaccg ggctgccgga
360
gatgagctgg caggctacct aagtcgacat gcacagctgt ggtcggagtt tcgtgctgca
420
tcccagcgtc ttcagcgcct caacgaggat cgcgctgggg ccgagatgga acgcgaggtg
480
cttacgcgt
489

```

<210> 1274

<211> 163

<212> PRT

<213> Homo sapiens

<400> 1274

```

Ala Gly Glu Thr Gly Ala Gly Lys Thr Met Val Val Thr Gly Ile Gly
 1           5           10           15
Leu Leu Leu Gly Asp Lys Ala Asp Thr Gly Leu Val Arg His Gly Cys
           20           25           30
Asp Arg Ala Val Val Glu Ala Val Leu Asp Thr Pro Asp Ala Gly Arg
           35           40           45
Val Ser Glu Leu Gly Gly Thr Val Glu Asp Gly Glu Val Ile Cys Ala
           50           55           60
Arg His Ile Thr Ser Arg Arg Ser Arg Ala Leu Leu Gly Gly Ala Gln
65           70           75           80
Val Thr Ala Ser Gln Leu Ala His Ile Val Gly Asp Gln Val Thr Ile
           85           90           95
His Gly Gln Ser Glu Gln Val Arg Leu Val Asp Ala Ala Arg Gln Leu
           100          105          110
Asp Val Val Asp Arg Ala Ala Gly Asp Glu Leu Ala Gly Tyr Leu Ser
           115          120          125
Arg His Ala Gln Leu Trp Ser Glu Phe Arg Ala Ala Ser Gln Arg Leu
           130          135          140
Gln Arg Leu Asn Glu Asp Arg Ala Gly Ala Glu Met Glu Arg Glu Val
145          150          155          160
Leu Thr Arg

```

<210> 1275

<211> 384

<212> DNA

<213> Homo sapiens

<400> 1275

```

nngctagcaa gtgcaagtac gagcaaaagt tatcagcaac agcgggagggc tgaacttctc
60
gtcgcacggc tagaggggga aatgcacgca cacagcgacc cgaccccgtc gccacaacca
120
cccgagggatg caggggttgat tgatgttgcc ctgaaagagg cgaagaaagc ctttgatgaa
180
ggcaagggtcg atctaattgga taaactcaat caggagatac ttcgcctggc aaacgaattc
240
ggcgcgctcg ggcttgaatc tattgagctt ggctccgacg cgaagatggc agtacgcaaa
300
ggcaatcaga aatcagcggtt cagcaggctg actcccggtg aacgtctcag gctgcgcatt
360
gctacagcca tcgcgttggt acgc
384

```

<210> 1276

<211> 128

<212> PRT

<213> Homo sapiens

<400> 1276

```

Xaa Leu Ala Ser Ala Ser Thr Ser Lys Ser Tyr Gln Gln Gln Arg Glu

```

```

      1             5             10             15
Ala Glu Leu Leu Val Ala Arg Leu Glu Gly Glu Met His Ala His Ser
      20             25             30
Asp Pro Thr Pro Ser Pro Gln Pro Pro Glu Asp Ala Gly Leu Ile Asp
      35             40             45
Val Ala Leu Lys Glu Ala Lys Lys Ala Phe Asp Glu Gly Lys Val Asp
      50             55             60
Leu Met Asp Lys Leu Asn Gln Glu Ile Leu Arg Leu Ala Asn Glu Phe
      65             70             75             80
Gly Ala Leu Gly Leu Glu Ser Ile Glu Leu Gly Ser Asp Ala Lys Met
      85             90             95
Ala Val Arg Lys Gly Asn Gln Lys Ser Ala Phe Ser Arg Leu Thr Pro
      100            105            110
Gly Glu Arg Leu Arg Leu Arg Ile Ala Thr Ala Ile Ala Leu Leu Arg
      115            120            125

```

<210> 1277

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1277

```

cagtttcagc cccgctgtgt gtccccaatt cctgtctctc ctaccagccg gattcagaac
60
ccagtggctt tcctcagctc tgttctgect tctctccctg ccatcccacc caciaatgcc
120
atggggctgc ctagaagtgc accatccatg ccatcccagg gattagcgaa gaaaaataca
180
aagtctcctc aaccagtga tgaatgataac attcgtgaaa ctaagaacgc agtgattcga
240
gacttgggga aaaaaataac tttcagtgat gtcagaccaa accagcagga gtacaaaatt
300
tcaagctttg agcagaggct gatgaatgaa atagagtttc gcttggaaac tactcctgtt
360
gatgaatcac atgatgaaat tcaacatgat gg
392

```

<210> 1278

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1278

```

Gln Phe Gln Pro Arg Cys Val Ser Pro Ile Pro Val Ser Pro Thr Ser
      1             5             10             15
Arg Ile Gln Asn Pro Val Ala Phe Leu Ser Ser Val Leu Pro Ser Leu
      20             25             30
Pro Ala Ile Pro Pro Thr Asn Ala Met Gly Leu Pro Arg Ser Ala Pro
      35             40             45
Ser Met Pro Ser Gln Gly Leu Ala Lys Lys Asn Thr Lys Ser Pro Gln
      50             55             60
Pro Val Asn Asp Asp Asn Ile Arg Glu Thr Lys Asn Ala Val Ile Arg
      65             70             75             80
Asp Leu Gly Lys Lys Ile Thr Phe Ser Asp Val Arg Pro Asn Gln Gln

```

85 90 95
 Glu Tyr Lys Ile Ser Ser Phe Glu Gln Arg Leu Met Asn Glu Ile Glu
 100 105 110
 Phe Arg Leu Glu Arg Thr Pro Val Asp Glu Ser His Asp Glu Ile Gln
 115 120 125
 His Asp
 130

<210> 1279

<211> 297

<212> DNA

<213> Homo sapiens

<400> 1279

atggagtcgc agactctccg ccacatgatac gaggacgact gcgccgacaa cggcatccca
 60
 ctccccaaacg tcaactccag gatcctctct aaggatcatcg agtactgcaa cagtcacgtc
 120
 cagccgcgcg ccaaaccgc tgactccgct gcctccgagg gcggcgagga cctcaagagc
 180
 tgggacgcga agttcgtcaa ggtggaccag gctacgtctc tcgacctcat cctggctgcc
 240
 aactatctga acatcaaggg attgctggac ctgacctgcc agacgggtgc tgacatg
 297

<210> 1280

<211> 99

<212> PRT

<213> Homo sapiens

<400> 1280

Met Glu Ser Gln Thr Leu Arg His Met Ile Glu Asp Asp Cys Ala Asp
 1 5 10 15
 Asn Gly Ile Pro Leu Pro Asn Val Asn Ser Arg Ile Leu Ser Lys Val
 20 25 30
 Ile Glu Tyr Cys Asn Ser His Val His Ala Ala Ala Lys Pro Ala Asp
 35 40 45
 Ser Ala Ala Ser Glu Gly Gly Glu Asp Leu Lys Ser Trp Asp Ala Lys
 50 55 60
 Phe Val Lys Val Asp Gln Ala Thr Leu Phe Asp Leu Ile Leu Ala Ala
 65 70 75 80
 Asn Tyr Leu Asn Ile Lys Gly Leu Leu Asp Leu Thr Cys Gln Thr Gly
 85 90 95
 Ala Asp Met

<210> 1281

<211> 515

<212> DNA

<213> Homo sapiens

<400> 1281

acgcgtgaag ggggctttgg aggggatggc ttctggactg cacgatgggt gaacacagtt
 60

ttttaaactc ttttccacat ctgtataggt ttgaaaatta tcaacaactc atgggggaggg
 120
 tggcgtgccca ggtcatggct gcctggagcc cttctgagga gggccggctc aaccgaggac
 180
 gccctcccca ctaccaagta ggcactgcgg gcaggagtcg ccacccccac cccaaggaag
 240
 ttcagaacag gcaacaggag gagcctgact ccaacagagt tgggtgtcatc cggcgcacatc
 300
 ctaaggacgt cacaacacat caactctggg agcccaaggg ggtgtgtggg ccactcaagg
 360
 ggaagatgat ccagaagctc tgctccctcc ctttgctttt gaagaacaca ggagtgcacac
 420
 gtggggaatc taccggctta atttcttctt agtaacaggc atagtaggat caaaaaattt
 480
 ttgcttctaa tttttaaaaa cattcaatgt gtaca
 515

<210> 1282
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 1282
 Met Gly Glu His Ser Phe Leu Asn Ser Phe Pro His Leu Tyr Arg Phe
 1 5 10 15
 Glu Asn Tyr Gln Gln Leu Met Gly Arg Val Ala Cys Gln Val Met Ala
 20 25 30
 Ala Trp Ser Pro Ser Glu Glu Gly Arg Leu Asn Arg Gly Arg Pro Pro
 35 40 45
 His Tyr Gln Val Gly Thr Ala Gly Arg Ser Arg His Pro His Pro Lys
 50 55 60
 Glu Val Gln Asn Arg Gln Gln Glu Glu Pro Asp Ser Asn Arg Val Gly
 65 70 75 80
 Val Ile Arg Arg Ile Ala Lys Asp Val Thr Thr His Gln Leu Trp Glu
 85 90 95
 Pro Lys Gly Val Cys Gly Pro Leu Lys Gly Lys Met Ile Gln Lys Leu
 100 105 110
 Cys Ser Leu Pro Leu Leu Leu Lys Asn Thr Gly Val Thr Arg Gly Glu
 115 120 125
 Ser Thr Gly Leu Ile Ser Ser
 130 135

<210> 1283
 <211> 296
 <212> DNA
 <213> Homo sapiens

<400> 1283
 gaattcctca caatgaactg cagtgtcttg aggaccagtt gggtagcctt actccggggtc
 60
 tccactgcag aacttataca tatatgcttt gtgcacacaa agaaaaacag cagcccaaaa
 120
 gaatcccggc tggggctctt aggagggagg aaagttccca caggtaactc actgggttaat
 180

tttaaagagc tcaggaaagg aaggaaggat ggctttttct cttgtgagtc aagacaaggt
 240
 cctgatgata accctcccag atcagaacgt aactttcaac ccacgagtc tgctcn
 296

<210> 1284

<211> 94

<212> PRT

<213> Homo sapiens

<400> 1284

Met	Asn	Cys	Ser	Val	Trp	Arg	Thr	Ser	Trp	Val	Ala	Leu	Leu	Arg	Val
1				5					10					15	
Ser	Thr	Ala	Glu	Leu	Ile	His	Ile	Cys	Phe	Val	His	Thr	Lys	Lys	Asn
			20					25					30		
Ser	Ser	Pro	Lys	Glu	Ser	Arg	Leu	Gly	Leu	Leu	Gly	Gly	Arg	Lys	Val
		35					40					45			
Pro	Thr	Gly	Asn	Ser	Leu	Val	Asn	Phe	Lys	Glu	Leu	Arg	Lys	Gly	Arg
	50					55					60				
Lys	Asp	Gly	Phe	Phe	Ser	Cys	Glu	Ser	Arg	Gln	Gly	Pro	Asp	Asp	Asn
65					70					75					80
Pro	Pro	Arg	Ser	Glu	Arg	Asn	Phe	Gln	Pro	Thr	Ser	Ala	Ala		
				85						90					

<210> 1285

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1285

gggccccttc ttacctgccc cttccccgtg ccaccaaccc gtagacaggg agggcaagca
 60
 gtgaaaggct catctagagg aggtaaaaga cagggctgag ggaaaacgcc ttgtacagtc
 120
 aggatggcag atgtactctg tcagggaaga cagccccaca gaaaaggctc ggcttggcca
 180
 agaagcaaca aaagggattc tacacctcag accagggagg gggaatgtgt acaaagattg
 240
 gatttactaa attcagagcc acagactttc aggtacttcg gtgaagatca gtgctctttc
 300
 aaacccacac ttcagaggca ggctttaaaa cgcttgactt ctgtcagggc cacaggctgg
 360
 gctgccc aaa gctcctacgg ggctggggga tccgagagag gacttcccac tagtccaaga
 420
 tgtggtgact agtttcaagc cagagattga ggagcagacc tgatgccctt tcgggcccct
 480
 gctaagaacc tgattcgagg aaaaggaagt gaagacagta acgcgt
 526

<210> 1286

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1286

```

Met Ala Asp Val Leu Cys Gln Gly Arg Gln Pro His Arg Lys Gly Ser
 1           5           10           15
Ala Trp Pro Arg Ser Asn Lys Arg Asp Ser Thr Pro Gln Thr Arg Glu
          20           25           30
Gly Glu Cys Val Gln Arg Leu Asp Leu Leu Asn Ser Glu Pro Gln Thr
          35           40           45
Phe Arg Tyr Phe Gly Glu Asp Gln Cys Ser Phe Lys Pro Thr Leu Gln
          50           55           60
Arg Gln Ala Leu Lys Arg Leu Thr Ser Val Arg Ala Thr Gly Trp Ala
65           70           75           80
Ala Gln Ser Ser Tyr Gly Ala Gly Gly Ser Glu Arg Gly Leu Pro Thr
          85           90           95
Ser Pro Arg Cys Gly Asp
          100

```

<210> 1287

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1287

```

acgcgtgaag gggagaggca gctccaggtg gaggggaagtg catgaggaag cagagaggca
60
ggcgacagggc agcgtggctg gggctgggca ggccttccag tttgattgca gcccagaggt
120
caggtgagaa gaaggtacaa caagcaagga aggccccagg aagccactgg ggggtgttga
180
gccattgaat attctggatt ttaggacatt tctgtggctg actccactgc catcagagtt
240
catccacccc aactccagcc tgagagtgcg ggggcactgg gcactccgga attcttcaaa
300
gctctgatgc aacatgtccc caggggtgtct gac
333

```

<210> 1288

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1288

```

Met Leu His Gln Ser Phe Glu Glu Phe Arg Ser Ala Gln Cys Pro Ser
 1           5           10           15
Thr Leu Arg Leu Glu Leu Gly Trp Met Asn Ser Asp Gly Ser Gly Val
          20           25           30
Ser His Arg Asn Val Leu Lys Ser Arg Ile Phe Asn Gly Ser Asn Thr
          35           40           45
Pro Ser Gly Phe Leu Gly Pro Ser Leu Leu Val Val Pro Ser Ser His
          50           55           60
Leu Thr Ser Gly Leu Gln Ser Asn Trp Lys Ala Cys Pro Ala Pro Ala
65           70           75           80
Thr Leu Pro Val Ala Cys Leu Ser Ala Ser Ser Cys Thr Ser Leu His
          85           90           95
Leu Glu Leu Pro Leu Pro Phe Thr Arg

```

100

105

<210> 1289
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 1289
 acgcgtgtct gtgtacaggt ggaaggggat gggatatgaga tgggtgcagcg tgtgcatggg
 60
 cacggcgat ggtgtgtgag tgcactcgtg tgccggagag ctgtaagctg ctggctgagt
 120
 cctgcacggg ggaggaggca aggtggcccc tgccgtgggg cacagagccc accttccggt
 180
 ccagcccgag gcccctttcc cagagcccc tcccaagggg ccataccacc tgcattcccca
 240
 agatggcggt gggcgctccct ggtgcaggag caggggacag tcagggaggc gtgtggcgga
 300
 cagtagcagc cccccagccc cctccccccc accggt
 336

<210> 1290
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 1290
 Met Val Cys Glu Cys Thr Arg Val Pro Glu Ser Cys Lys Leu Leu Ala
 1 5 10 15
 Glu Ser Cys Thr Val Glu Glu Ala Arg Trp Pro Leu Pro Val Gly Thr
 20 25 30
 Glu Pro Thr Phe Arg Ser Ser Pro Arg Pro Leu Ser Gln Ser Pro Leu
 35 40 45
 Pro Arg Gly His Thr Thr Cys Ile Pro Lys Met Ala Trp Gly Val Pro
 50 55 60
 Gly Ala Gly Ala Gly Asp Ser Gln Gly Gly Val Trp Arg Thr Val Ala
 65 70 75 80
 Ala Pro Gln Pro Pro Ser Pro His Arg
 85

<210> 1291
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 1291
 tggccatcca cctctgtcag ctgttccggc aaccattca gatcattgtg gtagtaacga
 60
 atctttctgca acggcccggc accgtccacg cgagccagag gttgatagcc ttcattcctca
 120
 taaacgtaca ggcttgtctg gctgtgttta tgctcctgca ataaccgcaa accatcccag
 180
 gtaaaccggg tttcccccaa cggataccca tcaactgcat gctcggtttt ttctatccga
 240

cgccccagcg ggtcatacac catcctgacc acgctaccat cgtcattacg cacttcaacc
 300
 agccggcttt cagcgtcata cgcaaaccgc tgcacgccac gcttggcact gcgcttctcg
 360
 accatccgcc caaacgcgt
 379

<210> 1292
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1292
 Met Val Glu Lys Arg Ser Ala Lys Arg Gly Val Gln Arg Phe Ala Tyr
 1 5 10 15
 Asp Ala Glu Ser Arg Leu Val Glu Val Arg Asn Asp Asp Gly Ser Val
 20 25 30
 Val Arg Met Val Tyr Asp Pro Leu Gly Arg Arg Ile Glu Lys Thr Glu
 35 40 45
 His Gly Ser Asp Gly Tyr Pro Leu Gly Glu Thr Arg Phe Thr Trp Asp
 50 55 60
 Gly Leu Arg Leu Leu Gln Glu His Lys His Ser Gln Thr Ser Leu Tyr
 65 70 75 80
 Val Tyr Glu Asp Glu Gly Tyr Gln Pro Leu Ala Arg Val Asp Gly Ala
 85 90 95
 Gly Pro Leu Gln Lys Ile Arg Tyr Tyr His Asn Asp Leu Asn Gly Leu
 100 105 110
 Pro Glu Gln Leu Thr Glu Val Asp Gly
 115 120

<210> 1293
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 1293
 nngccggccg cccgagagct gtctgaggcg tgccgcaacg gggacgtgga acgagtcaag
 60
 aggctggtga cgcctgagaa ggtgaacagc cgcgacacgg cgggcaggaa atccaccccg
 120
 ctgcacttcg ccgcagggtt tgggcggaaa gacgtagtgt aatatttgct tcagaatggt
 180
 gcaaattgtc aagcacgtga tgatgggggc cttattcctc ttcataatgc atgctctttt
 240
 ggtcatgctg aagtagtcaa tctccttttg cgacatggtg cagaccccaa tgcttgagat
 300
 aattggaatt atactcctag aggggtggagt gtgctcgcga
 340

<210> 1294
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1294

Xaa Pro Ala Ala Arg Glu Leu Phe Glu Ala Cys Arg Asn Gly Asp Val
 1 5 10 15
 Glu Arg Val Lys Arg Leu Val Thr Pro Glu Lys Val Asn Ser Arg Asp
 20 25 30
 Thr Ala Gly Arg Lys Ser Thr Pro Leu His Phe Ala Ala Gly Phe Gly
 35 40 45
 Arg Lys Asp Val Val Glu Tyr Leu Leu Gln Asn Gly Ala Asn Val Gln
 50 55 60
 Ala Arg Asp Asp Gly Gly Leu Ile Pro Leu His Asn Ala Cys Ser Phe
 65 70 75 80
 Gly His Ala Glu Val Val Asn Leu Leu Leu Arg His Gly Ala Asp Pro
 85 90 95
 Asn Ala

<210> 1295

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1295

ggatcccgga gacctcgctcg gcgaacgtca cctcgctccag ggccgaggcg cggaacaccg
 60
 acgtgtcgat gccctcgccc tcgatgcagt cggtcagcgg tacgacggcg ccgcgggagg
 120
 cgaagggtgcc gatctggctg cgctcggcgt agaccagcga cggcgggttcg cccgacgcca
 180
 cggaggagag gaactgctgg atgtcgaggt caccctcgat cagcttgacc ttggcgtcgc
 240
 cgagctcctc cttcgccccg tcgagccgca ccgtcgcgat ctcgtcgccg gcaccgaagc
 300
 ccatcacctc gacctcgccg gagagcttcg ccccgctgtc gaaagacgcg t
 351

<210> 1296

<211> 75

<212> PRT

<213> Homo sapiens

<400> 1296

Gly Ser Arg Arg Pro Arg Arg Arg Thr Ser Pro Arg Pro Gly Pro Arg
 1 5 10 15
 Arg Gly Thr Pro Thr Cys Arg Cys Pro Arg Pro Arg Cys Ser Arg Ser
 20 25 30
 Ala Val Arg Arg Arg Arg Gly Arg Arg Cys Arg Ser Gly Cys Ala
 35 40 45
 Arg Arg Arg Pro Ala Thr Ala Val Arg Pro Thr Pro Arg Arg Arg Gly
 50 55 60
 Thr Ala Gly Cys Arg Gly His Pro Arg Ser Ala
 65 70 75

<210> 1297

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1297

gtgcacccgg attccattg ccaccgactt cgagtaaact ccagtcccga ggacacgaga
 60
 gacacccagg cctcaggccc catgggcaag ctccacgcca cggctcctac cagagggaca
 120
 gatacactct acaaattctg gggcccacca caccaagaag acacggagga gccaacaaaa
 180
 gaaggaccat acgaaatgca cccccaagc aaccaaccaa tccaagaaaa aatacgtctc
 240
 agggttctgt gggccctctt gcatgggctg ccctgcccc ctgttctggc ctggctcaag
 300
 caccttacc cagcctgctc gaaagagccc tggctaccag agcagagcac tggcct
 356

<210> 1298

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1298

Met	Gly	Thr	Leu	His	Ala	Thr	Ala	Pro	Thr	Arg	Gly	Thr	Asp	Thr	Leu
1				5					10					15	
Tyr	Lys	Ser	Arg	Gly	Pro	Pro	His	Gln	Glu	Asp	Thr	Glu	Glu	Pro	Thr
			20					25					30		
Lys	Glu	Gly	Pro	Tyr	Glu	Met	His	Pro	Gln	Ser	Asn	Gln	Pro	Ile	Gln
		35					40					45			
Glu	Lys	Ile	Arg	Leu	Arg	Val	Leu	Trp	Ala	Leu	Leu	His	Gly	Leu	Pro
	50					55					60				
Cys	Pro	Pro	Val	Leu	Ala	Trp	Leu	Lys	His	Leu	Thr	Pro	Ala	Cys	Ser
65				70					75					80	
Lys	Glu	Pro	Trp	Leu	Pro	Glu	Gln	Ser	Thr	Gly					
			85					90							

<210> 1299

<211> 307

<212> DNA

<213> Homo sapiens

<400> 1299

ggatccactt ctaagatgtc tcaactcacgt ggtgatggca gcaggcctca gactctgggtg
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 gttgttggca ggatgtctca gttccttgcc atgtgggtct ctacacaggg cagcttcctg
 120
 tgtctttgcc atatggcaac tgagaatgat cttggctacc ttctccagcc cgggagtcgg
 180
 gagttttctg ggggtggggtc acgggtcttg cccggagttc gccctggcaa aggcctgtgc
 240
 cagtgatcct ggagcggagc gaagtgtttc cgtgactctg cagccgcagt tcttagggct
 300
 tccttag
 307

<210> 1300
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1300
 Met Ala Ala Gly Leu Arg Leu Trp Trp Leu Leu Ala Gly Cys Leu Ser
 1 5 10 15
 Ser Leu Pro Cys Gly Ser Leu His Arg Ala Ala Ser Cys Val Phe Ala
 20 25 30
 Ile Trp Gln Leu Arg Met Ile Leu Ala Thr Phe Ser Ser Pro Gly Val
 35 40 45
 Gly Ser Phe Leu Gly Trp Gly His Gly Ser Cys Pro Glu Phe Ala Leu
 50 55 60
 Ala Lys Ala Cys Ala Ser Asp Pro Gly Ala Glu Arg Ser Val Ser Val
 65 70 75 80
 Thr Leu Gln Pro Gln Phe Leu Gly Leu Pro
 85 90

<210> 1301
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 1301
 ctgagcaagt taaaagaagt tcttgaattt tataacttta ttttgacaaa ctattataaa
 60
 gttgagccta tttcctttga tgcagtatac gctgaagggt tggaaatggc tgagttcttg
 120
 cgccctatgg tgtcagatac gattacactt ttgcatgacc ttagaagggtc tggcgcaaac
 180
 atcatgtttg aaggcgcgca agggctctttg ttggatgttg atcatggtac ttaccgtat
 240
 gtgacttcat ctaatacgac tgcggggcgga gcgccagcgg gaacagggtt tggtcctttg
 300
 tacttagatt atgtattagg tatcactaag gcttatacga ctgcggttg ttctggacct
 360
 ttcctactg agttgtttga cgaagatggt gagcgtcttg gtacgcgt
 408

<210> 1302
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1302
 Leu Ser Lys Leu Lys Glu Val Leu Glu Phe Tyr Asn Phe Ile Leu Thr
 1 5 10 15
 Asn Tyr Tyr Lys Val Glu Pro Ile Ser Phe Asp Ala Val Tyr Ala Glu
 20 25 30
 Gly Leu Glu Met Ala Glu Phe Leu Arg Pro Met Val Ser Asp Thr Ile
 35 40 45
 Thr Leu Leu His Asp Leu Arg Arg Ser Gly Ala Asn Ile Met Phe Glu

50		55		60											
Gly	Ala	Gln	Gly	Ser	Leu	Leu	Asp	Val	Asp	His	Gly	Thr	Tyr	Pro	Tyr
65					70					75					80
Val	Thr	Ser	Ser	Asn	Thr	Thr	Ala	Gly	Gly	Ala	Pro	Ala	Gly	Thr	Gly
				85						90				95	
Phe	Gly	Pro	Leu	Tyr	Leu	Asp	Tyr	Val	Leu	Gly	Ile	Thr	Lys	Ala	Tyr
			100					105					110		
Thr	Thr	Arg	Val	Gly	Ser	Gly	Pro	Phe	Pro	Thr	Glu	Leu	Phe	Asp	Glu
		115					120					125			
Asp	Gly	Glu	Arg	Leu	Gly	Thr	Arg								
130					135										

<210> 1303
 <211> 1037
 <212> DNA
 <213> Homo sapiens

<400> 1303
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 gtttgccctg gggccctctc atcccacatc attttttcaa cccttcecca ncctttcnga
 120
 aatagggcc aacccttaaa aancaaatnt tcanataaac ccttttccct ccaccctttt
 180
 cccatcccat cctttttccc tcacaaacac aaacaaaang cctctttcct ttgccatttc
 240
 cactcctttt ggaagaaaca ggccctgttc cctccctgct caccacttca cccagctcag
 300
 ctggcacaaa aatactgcc aacacacctc accctgccta gcccaacctg gcagggcctc
 360
 ggagtagcct gccagctaaa atacgggttg cccagataac tgtgaatgtc agataagaat
 420
 cttctgggac aagtatgtcc catgccatat ttgggacata cttacactaa taaatctctg
 480
 tttatctgaa actcaaattt gcctggggcgt cctgtacttt tcttaactaa atttggtgcc
 540
 tctacacaca aggtccctgg ggtggggggg cacaggagca agccccttcc caggctgggt
 600
 ccctgccggc atctcccaca ggccaggact ggccaccag atggagcccg tgccaggcag
 660
 cggcgacag acggacaaag gctgctcagg agacactgca caccttcctc tttcttgtct
 720
 gggggctcaa gaatccagac gccacacctc ccgagcgagc accaagacag gaagccaacc
 780
 tgcaatgcc agcccactgc gaccacaggg ctctgccggg gtcttgccgg aaccagggt
 840
 tccggtccag aagccaggga taaatgccgc ttctcctata gggacgggtca gagtagagag
 900
 ggggaggcct acagtctcac ctgcaggag aggaagtcct cggggcgggc acgtgggggg
 960
 cctgacagct ccgagcacac ccggccacag tgaccacgga ctgcacacgc agaagcagtc
 1020
 tggatccac gcgtggc
 1037

<210> 1304
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1304
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 1 5 10 15
 Gly Asp Thr Ala His Leu Pro Leu Ser Cys Leu Gly Ala Gln Glu Ser
 20 25 30
 Arg Arg Pro Pro Pro Arg Ala Ser Thr Lys Thr Gly Ser Gln Pro Ala
 35 40 45
 Met Pro Ser Pro Leu Arg Pro Gln Gly Ser Ala Gly Val Leu Pro Glu
 50 55 60
 Pro Arg Val Pro Val Gln Lys Pro Gly Ile Asn Ala Ala Ser Pro Ile
 65 70 75 80
 Gly Thr Val Arg Val Glu Arg Gly Arg Pro Thr Val Ser Pro Ala Gly
 85 90 95
 Arg Gly Ser Pro Arg Gly Gly His Val Gly Gly Leu Thr Ala Pro Ser
 100 105 110
 Thr Pro Gly His Ser Asp His Gly Leu His Thr Gln Lys Gln Ser Gly
 115 120 125
 Ser His Ala Trp
 130

<210> 1305
 <211> 775
 <212> DNA
 <213> Homo sapiens

<400> 1305
 nacgcgttct gcgaggccat gcggggtctat gccccgcggc cgttgacctc gccacactc
 60
 ccggccccgc tgcgggtgga gagacgtcgg gccctctacg ggtcctggta cgagtttttc
 120
 ccgcgctctc aggggtgctta tgcgatgcg gacggtcact gggtttcagg tactttcgac
 180
 acctcctggg agcgccctgga cgccgcgct gcgatgggat ttgacgttgt ttacctgccc
 240
 gcgatccatc ccatggggcca agccttcgc aagggcaagg acaacaccct gaccccaggt
 300
 ccggacgata cgggatcgcc gtggggccatc ggatcgtctg atggcgggcca tgacaccatt
 360
 caccgccacc taggcacctt cgacgacctc gaccgtttcg tggcccacgc tcatgacctc
 420
 ggcatggagg tggccctaga ttttgcttg caagcctcac cagaccaccc gtgggtacac
 480
 cagcaccgg agtggttcac gaccgcggt gatggcacca tcgcctatgc agaaaattca
 540
 cccaaaaagt atcaggacat ctaccgcatc aacttcgaca atgaccctga cggtatctac
 600
 caggaatgct tgcggctgct ggagttatgg atctcccacg gcgtgacgat tttccgcgtc
 660

gataatccac ataccaagcc tctgaatttc tgggcctggc tcatggaaca gggtcatcgt
 720
 cggtcaccccg aggtcatctt cctggcagag gccttcaccc gtcccagat gatca
 775

<210> 1306
 <211> 258
 <212> PRT
 <213> Homo sapiens

<400> 1306
 Xaa Ala Phe Cys Glu Ala Met Arg Val Tyr Ala Pro Arg Pro Leu Thr
 1 5 10 15
 Ser Pro Thr Leu Pro Ala Pro Leu Arg Val Glu Arg Arg Arg Ala Leu
 20 25 30
 Tyr Gly Ser Trp Tyr Glu Phe Phe Pro Arg Ser Gln Gly Ala Tyr Val
 35 40 45
 Asp Ala Asp Gly His Trp Val Ser Gly Thr Phe Asp Thr Ser Trp Glu
 50 55 60
 Arg Leu Asp Ala Ala Ala Met Gly Phe Asp Val Val Tyr Leu Pro
 65 70 75 80
 Ala Ile His Pro Met Gly Gln Ala Phe Arg Lys Gly Lys Asp Asn Thr
 85 90 95
 Leu Thr Pro Gly Pro Asp Asp Pro Gly Ser Pro Trp Ala Ile Gly Ser
 100 105 110
 Ser Asp Gly Gly His Asp Thr Ile His Pro Asp Leu Gly Thr Phe Asp
 115 120 125
 Asp Leu Asp Arg Phe Val Ala His Ala His Asp Leu Gly Met Glu Val
 130 135 140
 Ala Leu Asp Phe Ala Leu Gln Ala Ser Pro Asp His Pro Trp Val His
 145 150 155 160
 Gln His Pro Glu Trp Phe Thr Thr Arg Val Asp Gly Thr Ile Ala Tyr
 165 170 175
 Ala Glu Asn Ser Pro Lys Lys Tyr Gln Asp Ile Tyr Pro Ile Asn Phe
 180 185 190
 Asp Asn Asp Pro Asp Gly Ile Tyr Gln Glu Cys Leu Arg Leu Leu Glu
 195 200 205
 Leu Trp Ile Ser His Gly Val Thr Ile Phe Arg Val Asp Asn Pro His
 210 215 220
 Thr Lys Pro Leu Asn Phe Trp Ala Trp Leu Met Glu Gln Val His Arg
 225 230 235 240
 Arg His Pro Glu Val Ile Phe Leu Ala Glu Ala Phe Thr Arg Pro Glu
 245 250 255
 Met Ile

<210> 1307
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1307
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atgctgggca catgcggtca gggccctgtg cctgagccgt ggaactccac agccattcca
 120
 catgttcagt cccacaccct gagggccaagg caccctgagt ccctgagggga gcaaggccct
 180
 gccacccgag gctgccgctg cagaggcaaa cagccctgag caaggcccg gcaacccagg
 240
 ctgtggctgc atggggcaaa cacagcctgg cctgaggctg ccggccagtc ggggtggcca
 300
 taggctaacg agaagccagg gcctccctcc cactggggtt ttccacaaaa acctgactaa
 360
 tgtccaggga cagccaaagg ccttgagggtc agctgggtgg aacacctttc ccctaccatc
 420
 ccgagatatt gtcttcttgg atggagtttt caaagccctc catgtggagg tctcgggatg
 480
 agaggcctcg gctgagctct gtgcagagga gcaggaagct gcagaatggg caccgcctc
 540
 cctcccagca cctccagtcg ctgccacgcc ccaagctcct gagctgctct gcccagacc
 600
 tcccccaacc ttggtctgac gcgt
 624

<210> 1308

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1308

Met	Ala	Thr	Pro	Thr	Gly	Arg	Gln	Pro	Gln	Ala	Arg	Leu	Cys	Leu	Pro
1				5					10					15	
His	Ala	Ala	Thr	Ala	Trp	Gly	Cys	Arg	Ala	Leu	Leu	Gly	Ala	Val	Cys
			20					25					30		
Leu	Cys	Ser	Gly	Ser	Leu	Gly	Trp	Gln	Gly	Leu	Ala	Pro	Ser	Gly	Thr
		35					40					45			
Arg	Gly	Ala	Leu	Ala	Ser	Gly	Cys	Gly	Thr	Glu	His	Val	Glu	Trp	Leu
	50					55					60				
Trp	Ser	Ser	Thr	Ala	Gln	Ala	Gln	Gly	Pro	Asp	Arg	Met	Cys	Pro	Ala
65					70				75					80	
Ser	Leu	Thr	Ser	Pro	Glu	Val	Gly	Cys	Arg	Glu	Pro	Gly	Ala	Trp	His
				85					90					95	
Ser	Pro	Pro	Ala												
															100

<210> 1309

<211> 563

<212> DNA

<213> Homo sapiens

<400> 1309

ntgatcatcg ccaaccacca gtccaactat gacctgttcg tgtttggcac gggagtggcc
 60
 taccgtactg tgtgtatcgg caaaaagagc ctgaaatggg tgccgctgtt cggtcagttg
 120
 ttctggctgg cgggcaatgt gttgattgac cggggcaacg cgcacaaggc gcgccgctca
 180

atgctcacca ccacccacac cttgcagcat aaagacacat cgatctgggt atttgccgaa
 240
 ggtacacgca acttcggtga aaccttgctg ccgttcaaga aagggtgcgtt ccagatggcg
 300
 attgccgcag gtgtgccgat cgtgcaggtg tgtgtcagca cgtatgtgaa gcacatgaag
 360
 ctcaatcggtt gggacagtgg cgatatatta attcgctcgt tgccgccaat tcctacgacc
 420
 ggactgacgt tggatgacat gccacggttg atggagacct gccgtcaaca aatgcgcgag
 480
 tgcattgagg caatggaccg cgagctggaa atcgtccttt gtaggaacga attggctcgc
 540
 gaagggcggtt aacgactacg cgt
 563

<210> 1310
 <211> 183
 <212> PRT
 <213> Homo sapiens

<400> 1310
 Xaa Ile Ile Ala Asn His Gln Ser Asn Tyr Asp Leu Phe Val Phe Gly
 1 5 10 15
 Thr Gly Val Pro Tyr Arg Thr Val Cys Ile Gly Lys Lys Ser Leu Lys
 20 25 30
 Trp Val Pro Leu Phe Gly Gln Leu Phe Trp Leu Ala Gly Asn Val Leu
 35 40 45
 Ile Asp Arg Gly Asn Ala His Lys Ala Arg Arg Ser Met Leu Thr Thr
 50 55 60
 Thr His Thr Leu Gln His Lys Asp Thr Ser Ile Trp Val Phe Ala Glu
 65 70 75 80
 Gly Thr Arg Asn Phe Gly Glu Thr Leu Leu Pro Phe Lys Lys Gly Ala
 85 90 95
 Phe Gln Met Ala Ile Ala Ala Gly Val Pro Ile Val Gln Val Cys Val
 100 105 110
 Ser Thr Tyr Val Lys His Met Lys Leu Asn Arg Trp Asp Ser Gly Asp
 115 120 125
 Ile Leu Ile Arg Ser Leu Pro Pro Ile Pro Thr Thr Gly Leu Thr Leu
 130 135 140
 Asp Asp Met Pro Arg Leu Met Glu Thr Cys Arg Gln Gln Met Arg Glu
 145 150 155 160
 Cys Ile Glu Ala Met Asp Arg Glu Leu Glu Ile Val Pro Cys Arg Asn
 165 170 175
 Glu Leu Ala Arg Glu Gly Arg
 180

<210> 1311
 <211> 674
 <212> DNA
 <213> Homo sapiens

<400> 1311
 gagcttgacg acgcccacg tgacatcctt gtagcaggcg ggtacttgac caatgatccc
 60

tccagggccg acccggcaca caccgtcggg ctgacggatg atctgagctg ggtcaagcgc
 120
 atctcccggc cgccgaaagc cggaatacca cgaggcgctg gatcggcgat tctgttcaca
 180
 gggctgaccc ccgatcagga tcgactgacc aacgagtggg cgcaggcgca cgggttgggg
 240
 gaattttatg tcatggcccc ccgaatcctc ggtgatgtcc cgtgccaac gatcaccatc
 300
 gtcgcgaccg tcaccttcat cgtgttgctg gccatcatgg cgggcctgtt ggcgaaggag
 360
 gagagagccg ccaacagtga tctggtgacc agcctcaaac gcacgagatt gggcaggcgt
 420
 tgggtggacc aggtcatcct tgtggagggtg gctaccacaa tgctggccgc cctgatatgc
 480
 ggggtgatct cctcggttgt cgcggtgtgg ctcacaggca ggatcctgtc gggagccttg
 540
 gacctgcttg gggccgcgtg gtgggtcttc ggtgcgttgg ccgccgggat gttcggtgga
 600
 tccttgctgg gggccgccat ccacgcccgt taccacttcg acatgagagc tacctgatcc
 660
 acgacccccgt gaca
 674

<210> 1312

<211> 196

<212> PRT

<213> Homo sapiens

<400> 1312

Met	Asp	Gly	Gly	Pro	Gln	Gln	Gly	Ser	Thr	Glu	His	Pro	Gly	Gly	Gln
1				5				10					15		
Arg	Thr	Glu	Asp	Pro	Pro	Arg	Gly	Pro	Lys	Gln	Val	Gln	Gly	Ser	Arg
		20						25					30		
Gln	Asp	Pro	Ala	Cys	Glu	Pro	His	Arg	Asp	Asn	Arg	Gly	Asp	His	Pro
		35					40					45			
Ala	Tyr	Gln	Gly	Gly	Gln	His	Cys	Gly	Ser	His	Leu	His	Lys	Asp	Asp
	50					55				60					
Leu	Val	His	Pro	Thr	Pro	Ala	Gln	Ser	Asp	Ala	Phe	Glu	Ala	Gly	His
	65				70					75				80	
Gln	Ile	Thr	Val	Gly	Gly	Ser	Leu	Leu	Leu	Arg	Gln	Gln	Ala	Arg	His
			85					90						95	
Asp	Gly	Arg	Gln	His	Asp	Glu	Gly	Asp	Gly	Arg	Asp	Asp	Gly	Asp	Arg
		100						105					110		
Trp	Gln	Arg	Asp	Ile	Thr	Glu	Asp	Ser	Gly	Gly	His	Asp	Ile	Lys	Phe
	115					120					125				
Pro	Gln	Pro	Val	Arg	Leu	Arg	Pro	Leu	Val	Gly	Gln	Ser	Ile	Leu	Ile
	130				135					140					
Gly	Gly	Gln	Pro	Cys	Glu	Gln	Asn	Arg	Arg	Ser	Ser	Ala	Ser	Trp	Tyr
	145			150					155					160	
Ser	Gly	Phe	Arg	Arg	Pro	Gly	Asp	Ala	Leu	Asp	Pro	Ala	Gln	Ile	Ile
			165				170						175		
Arg	Gln	Pro	Asp	Gly	Val	Cys	Arg	Val	Gly	Pro	Gly	Gly	Ile	Ile	Gly
		180					185						190		
Gln	Val	Pro	Ala												

195

<210> 1313
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1313
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 gtgggtggcag ctagcgtagg acagtcacga gatttaggag ataaaataga aggtggcggc
 120
 aaggaagggga gaggacagag cctgggtgtga ctctggggtt tctgggtgtgt atagctggtg
 180
 gacagtgggtg tctttgccaa gaggggagcc ctggaagagg agaggtttgc agggcaggtg
 240
 ctgagtccgg ttttggacac gctgaatttg aggtatctgt cagatatgag acccaaaagg
 300
 tgagggcggg gaagtggatg tgcaggccct gagctctggg aggggtctgg gtatgctgtg
 360
 gtcatga
 367

<210> 1314
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1314
 Met Thr Thr Ala Tyr Pro Asp Pro Ser Gln Ser Ser Gly Pro Ala His
 1 5 10 15
 Pro Leu Pro Arg Pro His Leu Leu Gly Leu Ile Ser Asp Arg Tyr Leu
 20 25 30
 Lys Phe Ser Val Ser Lys Thr Gly Leu Ser Thr Cys Pro Ala Asn Leu
 35 40 45
 Ser Ser Ser Arg Ala Pro Leu Ala Lys Thr Pro Leu Ser Thr Ser
 50 55 60
 Tyr Thr His Gln Lys Pro Arg Ser His Thr Arg Leu Cys Pro Leu Pro
 65 70 75 80
 Ser Leu Pro Pro Pro Ser Ile Leu Ser Pro Lys Ser Arg Asp Cys Pro
 85 90 95
 Thr Leu Ala Ala Thr Thr Ala Ala Ala Pro Ala Ala Pro Pro Ala Pro
 100 105 110
 Ala Thr Trp Arg Gly Cys Met Asp Ile
 115 120

<210> 1315
 <211> 5245
 <212> DNA
 <213> Homo sapiens

<400> 1315
 nntccggaga ccatggacga agattcttcg ttgagagatt atactgtaag cttggactct
 60

gacatggatg atgcatctaa gcttcttcag gattatgata ttcgaactgg caacaccagg
120
gaagctttga gtccttggtcc aagtactgta agtaccaagt ctcagccagg cagcagtgtc
180
tcttctagtt ctggagttaa aatgaccagc tttgctgaac aaaaattcag gaaactgaat
240
cataccgatg gaaaaagtag tgggaagcagt tctcaaaaaa ctacaccaga aggctctgaa
300
cttaatatcc ctcattgtgg tgcctgggca caaattccag aagaaacagg gcttccacag
360
ggacgggaca ctaccagct gttggcctct gaaatgggtgc atcttaggat gaaactagaa
420
gaaaagaggc gtgctataga agcccagaaa aagaaaatgg aagctgcttt taccaaacag
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540
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600
aaagaaaagg aatcacaaaa aactgatgga caaaggagca agtcactggc agatataaaa
660
gagagcatgg agaatcctca agccaaatgg ctaaagtctc caactacacc tattgatcct
720
gagaagcagt ggaacctggc aagcccctca gaagaaactt taaatgaagg agagatttta
780
gaatatacca aatccattga aaagttaa atcctcctgc attttctaca acaagaaatg
840
caacgcttgt cacttcagca ggagatgtta atgcagatga gagagcaaca atcttgggtg
900
atttcacctc cacaaccctc tccacagaaa cagattcgag attttaaac ttctaagcag
960
gcaggcctgt catcagccat tgcaccattc tctcagact cccctcgctc tactcaccca
1020
tctccacagt cttctaacag gaaaagtgc tctttttctg ttaaaagtca aaggactcct
1080
aggccaaatg agttaaaaaat aacacctttg aatcgaaact tgacacctcc tcggtctgtg
1140
gatagccttc ctcggttaag gaggttttca ccaagtcaag ttcctattca aactagggtca
1200
tttgatgtt ttggggatga tggagaacct cagttaaagg aatccaaacc taaagaggaa
1260
gttaaaaagg aggaattgga atccaaaggg actttggaac agcgtggaca taatccagaa
1320
gaaaaggaaa tcaaaccctt tgagtcaaca gtctctgaag tcctatcact gcctgtcaca
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1440
aaaccggtt tcccaccac tgctcaaaa aatgttaatc tgattgaagt ttccctctca
1500
gatttgaaac cccctgaaaa ggctgatgta cctgttgaaa aatatgatgg agaaagtgat
1560
aaagaacaat ttgatgatga ccagaaagta tgctgtggat tcttttttaa ggatgatcaa
1620
aaagcagaaa atgatatggc aatgaaacgg gcagctttgt tggagaaaag attaagaagg
1680

gaaaaggaaa ctcagctccg gaaacaacag ttggaagcag aaatggagca taagaaggag
1740
gaaacaaggc gtaaaactga ggaagaacgt cagaagaaag aagatgagag agcacgcaga
1800
gaatttatta ggcaagaata tatgaggcgg aaacaactga aactaatgga agatatggat
1860
acagtaatta aacccccgtcc tcaagtagta aaacaaaaaa aacagcgacc aaaatctatt
1920
cacagagatc atattgaatc ccccaaaaaca ccaataaagg gtcctccagt ctctagcctt
1980
tctttggcat cgctgaacac gggtgataac gagagtgtac attcaggcaa gaggacgcca
2040
agatcagagt ctgtagaagg cttcttatct ccaagtcgtt gtggcagtcg aaatggagaa
2100
aaagactggg agaatgcatc aacaacttct tcagtggctt ctggaacaga atatacagga
2160
ccaaagctct acaaagaacc cagtgcaaaa tccaataagc acataatata aaatgcttta
2220
gtcattgct gtttggctgg aaaagtaaag gaaggtcaga agaaaaaaat actggaggaa
2280
atggagaaat cagatgcaa caacttctta atcttggtcc gggattcagg atgccagttc
2340
agatctttat acacttattg ccagaaact gaagaaatca ataaactgac tgggataggc
2400
cctaaatcta tcactaaaaa aatgattgaa ggactttaca aatataattc tgacaggaaa
2460
cagtttagcc acataccgc taaaacttta tctgccagtg ttgatgcaat taccattcat
2520
agccatttat ggcagaccaa aagaccagta acacccaaaa aacttttacc cactaaggca
2580
tagaagttgg gaaatacttg cttcagaaca ttcattgtaa atttgcactt catctttcct
2640
gcctatagaa aatctttcta attgccaaac agacttttat taattaaaac tggacattaa
2700
gctctgttgt catgaacaac tggaatgtaa accacagtat tttggagtgc agaacattct
2760
caattaagtg ataagtcaa atgatgaagg aaatgtttta attcaciaat ggagatttgt
2820
atgtgttatc aggttcacct gcttgatatt agatacatca aagcactgaa tttcatgga
2880
tattagttgg atttatcatt gaaatatggt taagattaca aattatgtgt tttatttgtt
2940
gctttttttt aaccttttaa tgtatattct tgtcttcaga tggtttgcta tttttctctc
3000
ctggggggtt attctaagat acctttgtat tttatttcat gtggagatca tgaaagtagg
3060
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3120
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<210> 1316
 <211> 856
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Lys Ser Gln Pro Gly Ser Ser Ala Ser Ser Ser Ser Gly Val Lys Met
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 Thr Ser Phe Ala Glu Gln Lys Phe Arg Lys Leu Asn His Thr Asp Gly
 65 70 75 80
 Lys Ser Ser Gly Ser Ser Ser Gln Lys Thr Thr Pro Glu Gly Ser Glu
 85 90 95
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 Gly Leu Pro Gln Gly Arg Asp Thr Thr Gln Leu Leu Ala Ser Glu Met
 115 120 125
 Val His Leu Arg Met Lys Leu Glu Glu Lys Arg Arg Ala Ile Glu Ala
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 Gln Lys Lys Lys Met Glu Ala Ala Phe Thr Lys Gln Arg Gln Lys Met
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 Gly Arg Thr Ala Phe Leu Thr Val Val Lys Lys Lys Gly Asp Gly Ile
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 Ser Pro Leu Arg Glu Glu Ala Ala Gly Ala Glu Asp Glu Lys Val Tyr
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 Thr Leu Thr Pro Pro Arg Ser Val Asp Ser Leu Pro Arg Leu Arg Arg
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 Phe Ser Pro Ser Gln Val Pro Ile Gln Thr Arg Ser Phe Val Cys Phe
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 Gly Asp Asp Gly Glu Pro Gln Leu Lys Glu Ser Lys Pro Lys Glu Glu
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 Val Lys Lys Glu Glu Leu Glu Ser Lys Gly Thr Leu Glu Gln Arg Gly
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 Glu Val Leu Ser Leu Pro Val Thr Glu Thr Val Cys Leu Thr Pro Asn
 450 455 460
 Glu Asp Gln Leu Asn Gln Pro Thr Glu Pro Pro Pro Lys Pro Val Phe
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 Pro Pro Thr Ala Pro Lys Asn Val Asn Leu Ile Glu Val Ser Leu Ser
 485 490 495
 Asp Leu Lys Pro Pro Glu Lys Ala Asp Val Pro Val Glu Lys Tyr Asp
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 Gly Glu Ser Asp Lys Glu Gln Phe Asp Asp Asp Gln Lys Val Cys Cys
 515 520 525
 Gly Phe Phe Phe Lys Asp Asp Gln Lys Ala Glu Asn Asp Met Ala Met
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 Lys Arg Ala Ala Leu Leu Glu Lys Arg Leu Arg Glu Lys Glu Thr
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 Gln Leu Arg Lys Gln Gln Leu Glu Ala Glu Met Glu His Lys Lys Glu
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 Arg Ala Arg Arg Glu Phe Ile Arg Gln Glu Tyr Met Arg Arg Lys Gln
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 Val Val Lys Gln Lys Lys Gln Arg Pro Lys Ser Ile His Arg Asp His
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 Ile Glu Ser Pro Lys Thr Pro Ile Lys Gly Pro Pro Val Ser Ser Leu
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705					710					715				720	
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785					790					795					800
Thr	Lys	Lys	Met	Ile	Glu	Gly	Leu	Tyr	Lys	Tyr	Asn	Ser	Asp	Arg	Lys
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Gln	Phe	Ser	His	Ile	Pro	Ala	Lys	Thr	Leu	Ser	Ala	Ser	Val	Asp	Ala
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<210> 1317

<211> 1123

<212> DNA

<213> Homo sapiens

<400> 1317

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720
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840

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<210> 1318

<211> 285

<212> PRT

<213> Homo sapiens

<400> 1318

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			20					25					30		
Ala	Ala	Tyr	Thr	Gln	Thr	Glu	Pro	Glu	Gly	Ser	Gln	Pro	Ser	Thr	Met
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Asp	Ala	Thr	Ala	Val	Ala	Gly	Ile	Glu	Thr	Lys	Lys	Glu	Lys	Glu	Asp
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Leu	Cys	Leu	Leu	Lys	Lys	Glu	Glu	Lys	Glu	Glu	Pro	Val	Ala	Pro	Glu
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Leu	Ala	Thr	Thr	Val	Pro	Glu	Ser	Ala	Glu	Pro	Glu	Ala	Glu	Ala	Asp
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Pro	Lys	Glu	Pro	Glu	Lys	Arg	Arg	Ser	Lys	Arg	Ser	Arg	Val	Met	
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Asp	Ala	Asp	Gly	Leu	Leu	Glu	Met	Phe	His	Cys	Pro	Tyr	Glu	Gly	Cys
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Ser	Gln	Val	Tyr	Val	Ala	Leu	Ser	Ser	Phe	Gln	Asn	His	Val	Asn	Leu
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Val	His	Arg	Lys	Gly	Lys	Thr	Lys	Val	Cys	Pro	His	Pro	Gly	Cys	Gly
			165						170					175	
Lys	Lys	Phe	Tyr	Leu	Ser	Asn	His	Leu	Arg	Arg	His	Met	Ile	Ile	His
		180						185					190		
Ser	Gly	Val	Arg	Glu	Phe	Thr	Cys	Glu	Thr	Cys	Gly	Lys	Ser	Phe	Lys
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Pro	Leu	Gln	Cys	Val	Ile	Cys	Gly	Tyr	Gln	Cys	Arg	Gln	Arg	Ala	Ser
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Leu	Asn	Trp	His	Met	Lys	Lys	His	Thr	Ala	Glu	Val	Gln	Tyr	Asn	Phe
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Thr	Cys	Asp	Ala	Cys	Gly	Lys	Arg	Phe	Glu	Lys	Leu	Asp	Ser	Val	Lys
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Phe	His	Thr	Leu	Lys	Ser	His	Pro	Asp	His	Lys	Pro	Thr			
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<210> 1319
 <211> 538
 <212> DNA
 <213> Homo sapiens

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<210> 1320
 <211> 169
 <212> PRT
 <213> Homo sapiens

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 Cys Val Asn Gly Ser Leu Gly Ala Phe Leu Pro Leu Gly Ala Pro Trp
 35 40 45
 Glu Ser Gly Val Asp Ala Lys Ser Glu Ser Ser Trp Gly Gly Thr Gln
 50 55 60
 Lys Pro Trp Asp Gly Val Cys Met Gly Met Cys Arg Glu Ala Ala Thr
 65 70 75 80
 Met Gly Leu Gly Leu Pro Phe Ser Pro Ser Cys Pro Pro Pro Pro Ser
 85 90 95
 Pro Ser Leu Leu Pro Ser Phe Trp Lys Pro Ser Thr Gly Gly Asn Thr
 100 105 110
 His Arg Trp Asp Ala Gly Ile Arg Glu Ala His Arg Ser Cys His Ala
 115 120 125
 Ala Gly Val Cys Leu Ile Gln Glu Arg Gly His Ala Pro Arg Gly Val
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<210> 1321
<211> 1292
<212> DNA
<213> Homo sapiens

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<210> 1322
<211> 317
<212> PRT

<213> Homo sapiens

<400> 1322

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Pro Gly His Val Ile Val Lys Lys Ile Tyr Asn Asn Asn Val Leu Leu
      35           40           45
Gly Val Asn Gly Ser Gly Thr Glu Met Val Val Asn Ala Arg Gly Ile
      50           55           60
Ala Tyr Gly Arg His Arg Gly Glu Ile Val Asp Ala Ser Ser Ala Gln
65           70           75           80
Arg Tyr Val Ala Glu Gly Ala Tyr Arg Thr Thr Ala Ile Ala Ser Leu
      85           90           95
Leu Thr Asn Ala Thr His Thr Glu Val Arg Val Ala Gln Ala Ile Val
      100          105          110
Glu Leu Ala Arg Glu Glu Leu Gly Thr Pro His Ala Arg Arg Met Met
      115          120          125
Leu Pro Ile Leu Asp His Leu Val Ala Ala Val His Arg Ala Lys Gln
      130          135          140
Gly Ala Val Ile Asp Phe Pro Leu Glu Trp Glu Val Arg Gln Leu Tyr
145          150          155          160
Pro Asp Glu Ala Glu Leu Gly Arg Arg Ala Val Glu Ile Val Asp Gly
      165          170          175
Ala Leu Glu Ile His Leu Gln Pro Glu Glu Trp Val Ala Phe Ser Leu
      180          185          190
His Phe Ile Asn Gln Arg Trp Asp Ser Arg Asp Val Ser Arg Thr Met
      195          200          205
Ser Met Thr Gln Thr Ile Cys Asp Val Phe Thr Glu Leu Glu Asp Leu
      210          215          220
Trp His Val Glu Ile Asp Arg Ser Ser Met Ser Ala Ser Arg Phe Val
225          230          235          240
Thr His Leu Arg Tyr Leu Phe Ala Arg Ala Ser Asp Asn Lys Gln Leu
      245          250          255
Ser His Val Asp Leu Asp Ile Val Gly Leu Met Ser Asp Arg Tyr Pro
      260          265          270
Glu Ala Thr Leu Ala Ala Ser Gln Val Ala Glu His Ile Ser Lys Ala
      275          280          285
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Thr Thr Arg Leu Tyr Asn Glu Val Met Gly Met Asp Asp
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<210> 1323

<211> 306

<212> DNA

<213> Homo sapiens

<400> 1323

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120

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 306

<210> 1324
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1324
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 35 40 45
 Gly Val His Val Ile Thr Val Asn Asp Tyr Leu Ala Gln Arg Asp Ala
 50 55 60
 Glu Leu Asn Arg Pro Leu Phe Glu Phe Leu Gly Leu Ser Ile Gly Val
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 Ile Tyr Ser Met Gln Met Pro Ala Glu Lys Ala Gln Ala Tyr Leu Ala
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 Asp Ile Thr Tyr Gly Thr
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<210> 1325
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 1325
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 391

<210> 1326
 <211> 130
 <212> PRT

<213> Homo sapiens

<400> 1326

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Val His Met Gly Pro Leu Ala Asn Pro Thr Arg Gly Leu Arg Arg Ala
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Ile Leu Ala Ala Ile Val Ala Ala Cys Ser Val Ser Ala His Ala Gly
      20           25           30
Ser Trp Pro Glu Lys Pro Ile Thr Met Val Val Pro Phe Pro Ala Gly
      35           40           45
Gly Gly Thr Asp Leu Val Ala Arg Ser Ile Gln Pro Leu Leu Gln Arg
      50           55           60
Glu Leu Gly Gln Pro Val Val Ile Asp Asn Arg Ser Gly Ala Gly Gly
65           70           75           80
Thr Leu Gly Ser Ser Phe Val Ala Arg Ala Val Ala Asp Gly Tyr Thr
      85           90           95
Ala Gly Val Val Thr Thr Ser Thr His Ala Val Ser Val Ala Leu Tyr
      100          105          110
Pro Arg Leu Ala Tyr Asn Pro Thr Ala Asp Phe Ala Tyr Ala Gly Phe
      115          120          125
Ile Gly
      130

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<210> 1327

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1327

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gatgtgcagg gcttcgagcg ctggcgctcg gcacgcaccg gcgagccgct cgtcgatgcc
240
gcgatgcgcg agctggagac caccggctac ctcagcaaca ggctcagaca ggtggtcgcg
300
agctacctcg tgcacgagct ggga
324

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<210> 1328

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1328

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Xaa Arg Val Ile Ser Glu Leu Gln Gln Phe Glu Gln Ser His Gly Gln
 1           5           10           15
Ser Asp Gly Ser Tyr Trp Leu Trp Phe Glu Leu Leu Trp Arg Asp Tyr
      20           25           30
Phe Arg Phe Leu His Leu Arg His Gly Ala Arg Leu Tyr Arg Ala Arg
      35           40           45
Gly Leu Ala Asn Glu Val Arg His Ala Glu Arg Pro Asp Val Gln Gly

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50 55 60
 Phe Glu Arg Trp Arg Arg Ala Ser Thr Gly Glu Pro Leu Val Asp Ala
 65 70 75 80
 Ala Met Arg Glu Leu Glu Thr Thr Gly Tyr Leu Ser Asn Arg Leu Arg
 85 90 95
 Gln Val Val Ala Ser Tyr Leu Val His Glu Leu Gly
 100 105

<210> 1329
 <211> 438
 <212> DNA
 <213> Homo sapiens

<400> 1329
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 60
 ggcgatatcg gcatttacgc gatggcgacc ctgggtgtttg aactgctgga tagacaactc
 120
 cagggccttg aagaccatcc tgaatgggta gatgttgaaa tcgatgtggt acctggcatc
 180
 tctgcaatgc aagctgggtgc aagtcgtatt ggtgcgatgt taggtcatga cttttgtacg
 240
 gtgagtttgt ctgatttatt aacccttgg gaaactatta ataaacgtat tcatagtgc
 300
 ggtgaggggg attttgttat ctctttttat aaccctgttt ctaagaaacg tgattggcag
 360
 cttaaccacg cgcgtgatgt attattgaaa taccgtccag catcaacgcc agttttatta
 420
 ggtcgtcagt tgacgcgt
 438

<210> 1330
 <211> 146
 <212> PRT
 <213> Homo sapiens

<400> 1330
 Xaa Ala Arg Leu Ala Leu Asp Leu Ala Ser Ser Gly Lys Thr Thr Ser
 1 5 10 15
 Leu Ile Ser Ser Gly Asp Ile Gly Ile Tyr Ala Met Ala Thr Leu Val
 20 25 30
 Phe Glu Leu Leu Asp Arg Gln Leu Gln Gly Leu Glu Asp His Pro Glu
 35 40 45
 Trp Leu Asp Val Glu Ile Asp Val Val Pro Gly Ile Ser Ala Met Gln
 50 55 60
 Ala Gly Ala Ser Arg Ile Gly Ala Met Leu Gly His Asp Phe Cys Thr
 65 70 75 80
 Val Ser Leu Ser Asp Leu Leu Thr Pro Trp Glu Thr Ile Asn Lys Arg
 85 90 95
 Ile His Ser Ala Gly Glu Gly Asp Phe Val Ile Ser Phe Tyr Asn Pro
 100 105 110
 Val Ser Lys Lys Arg Asp Trp Gln Leu Asn His Ala Arg Asp Val Leu
 115 120 125
 Leu Lys Tyr Arg Pro Ala Ser Thr Pro Val Leu Leu Gly Arg Gln Leu

130 135 140
 Thr Arg
 145

<210> 1331
 <211> 453
 <212> DNA
 <213> Homo sapiens

<400> 1331
 gcgtaccgct ccgcggaact ggtgatgatg accgaggcac cgggatgcgg aatcccctgg
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 catcttcttg cccggcatcgg acgcatcgaa tccggtcacg ccaacggcgg caagacgacc
 120
 tcgggtgggta cgaacgtcac cccgatcctc ggccccatcc tcgacggacg gctggcaggg
 180
 aacgaagtca ttcggggacac cgacaagggc aatcgacggc gacccactca cgaccgcgcc
 240
 gtcggggccga tgcagttcat tccggccacc tgggcccggat atgccagcga cggcaacggg
 300
 gacggaatca aggaccccaa caacgtcttc gatgcggcac tctcggcagc gaagtacctc
 360
 tgcagcggcg gactcaacct gcgcgatgtc gcccaggaga ccaaagctgt tctgcgatac
 420
 aacaactcgg ccgcttacgc agcaaactg atc
 453

<210> 1332
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 1332
 Ala Tyr Arg Ser Ala Glu Leu Val Met Met Thr Glu Ala Pro Gly Cys
 1 5 10 15
 Gly Ile Pro Trp His Leu Leu Ala Gly Ile Gly Arg Ile Glu Ser Gly
 20 25 30
 His Ala Asn Gly Gly Lys Thr Thr Ser Val Gly Thr Asn Val Thr Pro
 35 40 45
 Ile Leu Gly Pro Ile Leu Asp Gly Arg Leu Ala Gly Asn Glu Val Ile
 50 55 60
 Arg Asp Thr Asp Lys Gly Asn Arg Arg Arg Pro Thr His Asp Arg Ala
 65 70 75 80
 Val Gly Pro Met Gln Phe Ile Pro Ala Thr Trp Ala Gly Tyr Ala Ser
 85 90 95
 Asp Gly Asn Gly Asp Gly Ile Lys Asp Pro Asn Asn Val Phe Asp Ala
 100 105 110
 Ala Leu Ser Ala Ala Lys Tyr Leu Cys Ser Gly Gly Leu Asn Leu Arg
 115 120 125
 Asp Val Ala Gln Glu Thr Lys Ala Val Leu Arg Tyr Asn Asn Ser Ala
 130 135 140
 Ala Tyr Ala Ala Asn Val Ile
 145 150

<210> 1333
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 1333
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 60
 ggcacagctc gtcggtcaag atgggtctag tgctgctcgt atggcgggcg aggcacccgc
 120
 gcgaagggct aaagcggatg gactaagcca gcttgtcatc gatgtcaatg gagacgccgt
 180
 cagcgtcgcg acggaaatca cccggcctac tcgtctatta gcccttattg gactaaccga
 240
 agtacacggt cgggcgagcg aaatgtgtat tttgctggct cgctgaggcc gttgcagcga
 300
 tacaatgatg aggtgtctaa gtattttccg gtccaccgag agaaccgcga gcagcgttct
 360
 ctcaatcaga tcgtcgacat cctgcacat ggcggtctta tcgcctaccc gacagacacg
 420
 ggttatgcct tcggtgcccg gntagggat aaggatgccg tggaccggat tcgcaaactt
 480
 cgccagttat ttgacaagca tcacttcacc ctggtcatga gccagtttgc gcaggttggc
 540

<210> 1334
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1334
 Val His Pro Glu Asn Pro Gln Gln Arg Ser Leu Asn Gln Ile Val Asp
 1 5 10 15
 Ile Leu His His Gly Gly Leu Ile Ala Tyr Pro Thr Asp Thr Gly Tyr
 20 25 30
 Ala Phe Gly Ala Arg Xaa Gly Asn Lys Asp Ala Val Asp Arg Ile Arg
 35 40 45
 Lys Leu Arg Gln Leu Phe Asp Lys His His Phe Thr Leu Val Met Ser
 50 55 60
 Gln Phe Ala Gln Val Gly
 65 70

<210> 1335
 <211> 748
 <212> DNA
 <213> Homo sapiens

<400> 1335
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 gtgaatgccca agaagaagcg tcgtgaggtc ctcgatcagg cctccgggta ccgtggtcag
 120
 cgctcgcgcc tgtaccgcaa ggccaaggag cagaccctcc attcggccac ttattcgttc
 180

cgtgaccgtc gtgctaagaa ggggtgacttc cgctcgctgt ggatccagcg catcaatgct
 240
 gcttccccgtg cccagggcat gacctacaac cgtttcatca acggtctgaa gaacgctggc
 300
 gtcgaggtcg accgcaagat gctcgctgag cttgccgtct ccgacattaa cgccttcaac
 360
 agcctggtcg aggtcgctaa ggctagccag ccgcagaacg ctgctgcctg agatggccat
 420
 gactggcggg ccgaacgacg actatttggg atgggatcgc atctcgaagg ggtcattgcg
 480
 ttcggcccgt cgtctttcat ctccggcgcgg acgcgatgag tccgggctgt tcttggtaga
 540
 aggtgcgcag gcagttcgtg aagccctagc atggccgggt aaagtcaatt tgttggcaac
 600
 ctccgaccca gctcgcgatg ctgagcatgt cgagggtggct acatgtcgtg gcgttcgggt
 660
 cgtggtgctc actgacgagg atgtcaatgc gctttctgat accgtcacca gtcaggggat
 720
 cttcgcggtg tgcggcagg ttacgcgt
 748

<210> 1336
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 1336
 Xaa Leu Ile Leu Phe Phe Pro Ile Pro Ile Pro Pro Leu Ser Asp Arg
 1 5 10 15
 Val Lys Arg Ser Val Asn Ala Lys Lys Lys Arg Arg Glu Val Leu Asp
 20 25 30
 Gln Ala Ser Gly Tyr Arg Gly Gln Arg Ser Arg Leu Tyr Arg Lys Ala
 35 40 45
 Lys Glu Gln Thr Leu His Ser Ala Thr Tyr Ser Phe Arg Asp Arg Arg
 50 55 60
 Ala Lys Lys Gly Asp Phe Arg Ser Leu Trp Ile Gln Arg Ile Asn Ala
 65 70 75 80
 Ala Ser Arg Ala Gln Gly Met Thr Tyr Asn Arg Phe Ile Asn Gly Leu
 85 90 95
 Lys Asn Ala Gly Val Glu Val Asp Arg Lys Met Leu Ala Glu Leu Ala
 100 105 110
 Val Ser Asp Ile Asn Ala Phe Asn Ser Leu Val Glu Val Ala Lys Ala
 115 120 125
 Ser Gln Pro Gln Asn Ala Ala Ala
 130 135

<210> 1337
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 1337
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 60

aggcagactc agctcatggg cgagcatgtc agtgaagggc acagcaaggc tcacgagtgg
 120
 gcctcttgcc tcatggtcag tgtgggtcag tgctttcgtc gtatgagact acagggtttc
 180
 tctgcctcac catggggggac gattgggtct gggtcacttc ctgctgtggg acctgtcctg
 240
 ggactgacg gatgtggggc agggctccta cgtgccagct accagatgcc agcagcacc
 300
 ccagaagtga caaccacaac catctccagg tgttgccagt gtcccctggg ggtagagtg
 360
 gccc
 364

<210> 1338

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1338
 Met Gly Glu His Val Ser Glu Gly His Ser Lys Ala His Glu Trp Ala
 1 5 10 15
 Ser Cys Leu Met Val Ser Val Gly Gln Cys Phe Arg Cys Met Arg Leu
 20 25 30
 Gln Gly Phe Ser Ala Ser Pro Trp Gly Thr Ile Gly Ser Gly Ser Leu
 35 40 45
 Pro Ala Val Gly Pro Val Leu Gly Thr Ala Gly Cys Gly Ala Gly Leu
 50 55 60
 Leu Arg Ala Ser Tyr Gln Met Pro Ala Ala Pro Pro Glu Val Thr Thr
 65 70 75 80
 Thr Thr Ile Ser Arg Cys Cys Gln Cys Pro Leu Gly Val Arg Val Ala
 85 90 95

<210> 1339

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1339
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 60
 tgggtcgtca ggtacgccga caagtacctc ggcgacgttg agttcggcta cgagtactct
 120
 cgggagatgt ttagccagac ccgcacggac ttcgctatcg acgtctgtca ctccgtgatg
 180
 gacgtgtggc agccggggcc aggccgtgag attatcctta atctgccggc taccgtcgag
 240
 atgagtactc cgaacaccta cgccgaccaa atcgagtact tctgccgcaa tatccgtgat
 300
 cgtgagcacg tgtgcgtctc tttgcacccg cacaatgatc gtggcacggc gatcggggc
 360
 gccgagttcg cgcagatggc gggcgccgat cgcgtcgagg gctgtttctt tggccccggc
 420
 gagcgcccgg gcaccgtcga cctggtcacc ctgggcatga acctcgtcag ccaggagatt
 480

gacgccggta tgcacttctc cgacatgccc aagatccgcc gcaccgtcga gtactgcacc
 540
 tgtctgccag taccggcccc ccagccctac tccggcgatc tgggtcttcac cgccttctcc
 600
 gggtcccacc aggacgccat caagaagggt ctggaagacc tggccccggcg cgc
 653

<210> 1340

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1340

Arg	Val	Val	Phe	Asn	Ile	Asp	Glu	Lys	Gln	Cys	Ile	Asp	Leu	Ala	His
1				5					10					15	
Arg	Gly	Thr	Glu	Trp	Val	Val	Arg	Tyr	Ala	Asp	Lys	Tyr	Leu	Gly	Asp
			20					25					30		
Val	Glu	Phe	Gly	Tyr	Glu	Tyr	Ser	Pro	Glu	Met	Phe	Ser	Gln	Thr	Arg
	35						40					45			
Thr	Asp	Phe	Ala	Ile	Asp	Val	Cys	His	Ser	Val	Met	Asp	Val	Trp	Gln
	50					55					60				
Pro	Gly	Pro	Gly	Arg	Glu	Ile	Ile	Leu	Asn	Leu	Pro	Ala	Thr	Val	Glu
65					70				75					80	
Met	Ser	Thr	Pro	Asn	Thr	Tyr	Ala	Asp	Gln	Ile	Glu	Tyr	Phe	Cys	Arg
				85					90					95	
Asn	Ile	Arg	Asp	Arg	Glu	His	Val	Cys	Val	Ser	Leu	His	Pro	His	Asn
			100					105					110		
Asp	Arg	Gly	Thr	Ala	Ile	Ala	Ala	Ala	Glu	Phe	Ala	Gln	Met	Ala	Gly
		115				120						125			
Ala	Asp	Arg	Val	Glu	Gly	Cys	Phe	Phe	Gly	Pro	Gly	Glu	Arg	Pro	Gly
	130					135					140				
Thr	Val	Asp	Leu	Val	Thr	Leu	Gly	Met	Asn	Leu	Val	Ser	Gln	Gly	Val
145				150					155					160	
Asp	Ala	Gly	Ile	Asp	Phe	Ser	Asp	Met	Pro	Lys	Ile	Arg	Arg	Thr	Val
			165					170						175	
Glu	Tyr	Cys	Thr	Cys	Leu	Pro	Val	Pro	Ala	Arg	Gln	Pro	Tyr	Ser	Gly
		180					185					190			
Asp	Leu	Val	Phe	Thr	Ala	Phe	Ser	Gly	Ser	His	Gln	Asp	Ala	Ile	Lys
	195					200					205				
Lys	Gly	Leu	Glu	Asp	Leu	Ala	Arg	Arg							
	210					215									

<210> 1341

<211> 666

<212> DNA

<213> Homo sapiens

<400> 1341

accggttgct gatttccttg ttggagtctt caccactatg agcagtgact ccattgtttt
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 gcaaagtttc ttgccttgct ttgatcatat tttcacaact ggattcccaa cagaagtgtg
 120
 gcaatctgta atagaaaagt tggcaaagaa aggattatgg cattcatttc tgcttctgtc
 180

agcaaaaaaa gaccgattac caagaaatat tcatgtccca gagttatcac tgaaaagtct
 240
 ctttgagaaa tacgttttca ttggacttta tgagaagatg gaacaagtgc ccaagttagt
 300
 ccagtggctc atctccattg gtgcaagtgt tgagactata ggaccgtatc cccttcatgc
 360
 cctcatgcga ctctgtatcc aagccagaga aaaccatctt ttccgggtggt taatggatca
 420
 caagccccgag tggaaaggcc gcattaacca gaaggatggg gatggctgca ctgtcctgca
 480
 cgtcgtcgtc gcccaactccc caggatacct cgttaagcga caaacagagg atgtgcagat
 540
 gctcctgcgc tttggggcag atcccacttt gctggatcga cagtctcggg ctgttgtgga
 600
 tgtcctgaag aggaataaga acttcaaagc catcgagaaa atcaacagtc acttagaaaa
 660
 gctagc
 666

<210> 1342
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1342
 Met Ser Ser Asp Ser Ile Val Leu Gln Ser Phe Leu Pro Cys Phe Asp
 1 5 10 15
 His Ile Phe Thr Thr Gly Phe Pro Thr Glu Val Trp Gln Ser Val Ile
 20 25 30
 Glu Lys Leu Ala Lys Lys Gly Leu Trp His Ser Phe Leu Leu Leu Ser
 35 40 45
 Ala Lys Lys Asp Arg Leu Pro Arg Asn Ile His Val Pro Glu Leu Ser
 50 55 60
 Leu Lys Ser Leu Phe Glu Lys Tyr Val Phe Ile Gly Leu Tyr Glu Lys
 65 70 75 80
 Met Glu Gln Val Pro Lys Leu Val Gln Trp Leu Ile Ser Ile Gly Ala
 85 90 95
 Ser Val Glu Thr Ile Gly Pro Tyr Pro Leu His Ala Leu Met Arg Leu
 100 105 110
 Cys Ile Gln Ala Arg Glu Asn His Leu Phe Arg Trp Leu Met Asp His
 115 120 125
 Lys Pro Glu Trp Lys Gly Arg Ile Asn Gln Lys Asp Gly Asp Gly Cys
 130 135 140
 Thr Val Leu His Val Val Ala Ala His Ser Pro Gly Tyr Leu Val Lys
 145 150 155 160
 Arg Gln Thr Glu Asp Val Gln Met Leu Leu Arg Phe Gly Ala Asp Pro
 165 170 175
 Thr Leu Leu Asp Arg Gln Ser Arg Ser Val Val Asp Val Leu Lys Arg
 180 185 190
 Asn Lys Asn Phe Lys Ala Ile Glu Lys Ile Asn Ser His Leu Glu Lys
 195 200 205
 Leu

<210> 1343
 <211> 270
 <212> DNA
 <213> Homo sapiens

<400> 1343
 ccggaatgt gccgagttct cctgacgcac gaagtgatgt gtagtcgatg ctgcgaaaag
 60
 aaaagctgtg gaaaccgaaa tgagactcca tcggacccag tcataattga cagattcttt
 120
 ttaaaatttt tcctcaagtg caatcagaat tgtttgaaaa cagcaggaaa cccaagggac
 180
 atgagacggg ttcaggttgt gttgtcaaca acggtgaatg tggatggaca cgtcctggct
 240
 gtttctgaca acatgtttgt tcataacaac
 270

<210> 1344
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1344
 Pro Glu Met Cys Arg Val Leu Leu Thr His Glu Val Met Cys Ser Arg
 1 5 10 15
 Cys Cys Glu Lys Lys Ser Cys Gly Asn Arg Asn Glu Thr Pro Ser Asp
 20 25 30
 Pro Val Ile Ile Asp Arg Phe Phe Leu Lys Phe Phe Leu Lys Cys Asn
 35 40 45
 Gln Asn Cys Leu Lys Thr Ala Gly Asn Pro Arg Asp Met Arg Arg Phe
 50 55 60
 Gln Val Val Leu Ser Thr Thr Val Asn Val Asp Gly His Val Leu Ala
 65 70 75 80
 Val Ser Asp Asn Met Phe Val His Asn Asn
 85 90

<210> 1345
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 1345
 acgcgtttga aaccaccga tgacttgctg gtgatcctgg gtaccgcgt cagcaacttc
 60
 agcggcaccg acaacaccga cttctacgac ccgaccaagg ccgacaaccg tctcacctac
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 cgccagacgg gcgtcgtcac gccctatgcc ggcacgtct acgacctgaa tgacatctgg
 180
 tcggtgtaca ccagctacac caagatctac aagccgcaga acagcaagga cgccgaccgc
 240
 aagttgctcg atccgattga aggtgacacc tacgaagccg ggctcaaggc agcgtttttc
 300
 gacggccgcc tgaacgccag ttttgccgca ttccgcatcg aacaggacaa cgtcgcacag
 360

tacgtttccg ggtttgagac cgactcgtgt atcgcccatt gc
402

<210> 1346

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1346

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Thr Arg Leu Lys Pro Thr Asp Asp Leu Ser Val Ile Leu Gly Thr Arg
 1           5           10           15
Val Ser Asn Phe Ser Gly Thr Asp Asn Thr Asp Phe Tyr Asp Pro Thr
      20           25           30
Lys Ala Asp Asn Arg Leu Thr Tyr Arg Gln Thr Gly Val Val Thr Pro
      35           40           45
Tyr Ala Gly Ile Val Tyr Asp Leu Asn Asp Ile Trp Ser Val Tyr Thr
      50           55           60
Ser Tyr Thr Lys Ile Tyr Lys Pro Gln Asn Ser Lys Asp Ala Asp Arg
      65           70           75           80
Lys Leu Leu Asp Pro Ile Glu Gly Asp Thr Tyr Glu Ala Gly Leu Lys
      85           90           95
Ala Ala Phe Phe Asp Gly Arg Leu Asn Ala Ser Phe Ala Ala Phe Arg
      100          105          110
Ile Glu Gln Asp Asn Val Ala Gln Tyr Val Ser Gly Phe Glu Thr Asp
      115          120          125
Ser Cys Ile Ala His Cys
      130

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<210> 1347

<211> 415

<212> DNA

<213> Homo sapiens

<400> 1347

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naccaccttc tgggcaggct ctcattcttt cattccaaga agcatttatt aaagactggc
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tagggcgagg gaaccagct aggggctggg gataaaaaat aagaaataac tgaaggacct
120
tgctcttaag gaactccatc ttactgggtg gagccaaacg agaaaagaga gctcgggagg
180
gcaccaaagc ggtcttgccg aaattgcctg aggcagggga aggggcacgc tttctgaaaa
240
acccccccaa accgattcca ggaagcccaa agggcgggccc ctctgcccgc agcactgcct
300
tcacgtttac ttccatcccc gcctcctcct tcccctaagg cttggcatgc aacatccctg
360
cttctcacc acccttttatt taagactcct attatctgca cacaatggaa gtttag
415

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<210> 1348

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1348

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Met Glu Val Asn Val Lys Ala Val Leu Arg Ala Glu Gly Pro Pro Phe
 1           5           10           15
Gly Leu Pro Gly Ile Gly Leu Gly Gly Phe Phe Arg Lys Arg Ala Pro
 20           25           30
Ser Pro Ala Ser Gly Asn Phe Gly Lys Thr Ala Leu Val Pro Ser Arg
 35           40           45
Ala Leu Phe Ser Arg Leu Ala Pro Pro Ser Lys Met Glu Phe Leu Lys
 50           55           60
Ser Lys Val Leu Gln Leu Phe Leu Ile Phe Tyr Pro Gln Pro Leu Ala
 65           70           75           80
Gly Phe Pro Arg Pro Ser Gln Ser Leu Ile Asn Ala Ser Trp Asn Glu
 85           90           95
Arg Met Arg Ala Cys Pro Glu Gly Gly
 100           105

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<210> 1349

<211> 924

<212> DNA

<213> Homo sapiens

<400> 1349

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gccgggatcg tcacaccaca gcaggtcgcg ttaccccatg acgtcttccg tgagcttggc
 60
gctcagacgg tcatgcgttc gatcgccgaa aagcttggcc ttccggtcat cgtaagccg
 120
gcacgtgggg gctcaagcct cggcgtcaca aaagtcgatg gcgtcgacga tcttcctcag
 180
gccgtcgcga acgcctatgc ctatgacgac atgggtgtag tcgaggaatt cattgtgggc
 240
aacgaactcg caatagggat gatcacgacg tctgaaggca cgcgtgtgct gccagccgctc
 300
gagattcgcc ctgtcgggtg tgtttatgat tattcagcga tgtacaccgg tggtagagaca
 360
cgactaacag ctctgcaga cattagcgat acggcgggcc aaaccgcgac ggcgatggcc
 420
cgagtcgtgc aaaaggagct cgatttctcc gggatatctc gtgtcgatgc gatcgtggac
 480
gagtcgggtc gccagtttt cttggaggcc ggtgctgctc ccgggatgac agctacttcg
 540
ctcgtacccg tggctatgaa agctgccggt ctagaccttg gcgaggtgtg ctctcgacta
 600
gtcgatgacg tcgctcgcaa ccatggctga cagtgtgcac acgaggggct cgcgccacgc
 660
cgtgcgcgtc aagcaggcat ctgtcgtctt gtcggcgctc gtccttgcca gtgtgatggt
 720
cttcctcgga ctgtggcaga tgaacgtttt tgagtcccaa cgtgacgact cgacgcaggc
 780
gcgtatcaac gagccagtga tcacctggaa tgaggcgctt aagaaggcca gtgtcatggc
 840
tcagtacgga cgccgggtga cggtgacggg cacgttccaa ccgtcgacca caaccttgat
 900
aggcacatcg tggccagtac gcgt
 924

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<210> 1350
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 1350
 Ala Gly Ile Val Thr Pro Gln Gln Val Ala Leu Pro His Asp Val Phe
 1 5 10 15
 Arg Glu Leu Gly Ala Gln Thr Val Met Arg Ser Ile Ala Glu Lys Leu
 20 25 30
 Gly Leu Pro Val Ile Val Lys Pro Ala Arg Gly Gly Ser Ser Leu Gly
 35 40 45
 Val Thr Lys Val Asp Gly Val Asp Asp Leu Pro Gln Ala Val Ala Asn
 50 55 60
 Ala Tyr Ala Tyr Asp Asp Met Val Val Val Glu Glu Phe Ile Val Gly
 65 70 75 80
 Asn Glu Leu Ala Ile Gly Met Ile Thr Thr Ser Glu Gly Thr Arg Val
 85 90 95
 Leu Pro Ala Val Glu Ile Arg Pro Val Gly Gly Val Tyr Asp Tyr Ser
 100 105 110
 Ala Met Tyr Thr Gly Gly Glu Thr Arg Leu Thr Ala Pro Ala Asp Ile
 115 120 125
 Ser Asp Thr Ala Ala Gln Thr Ala Thr Ala Met Ala Arg Val Val Gln
 130 135 140
 Lys Glu Leu Asp Phe Ser Gly Ile Ser Arg Val Asp Ala Ile Val Asp
 145 150 155 160
 Glu Ser Gly Arg Pro Val Phe Leu Glu Ala Gly Ala Ala Pro Gly Met
 165 170 175
 Thr Ala Thr Ser Leu Val Pro Val Ala Met Lys Ala Ala Gly Leu Asp
 180 185 190
 Leu Gly Glu Val Cys Ser Arg Leu Val Asp Asp Val Ala Arg Asn His
 195 200 205
 Gly

<210> 1351
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 1351
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 60
 gacgagacgc aaaacgcatt gcttctcagt attctgctgc accccgggtct gctcatcgtc
 120
 gaccacattc acttccagta caacgggttc ctaattcgcg ggccccttta tcgtttgggg
 180
 gccgcacgg acgcatcggc cctctttctc tgaaccgcc tgtttgctc gctgctccag
 240
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<400> 1352
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<211> 244

<212> PRT

<213> Homo sapiens

<400> 1356

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<211> 663

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 423

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 1360

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Val Gly Tyr Trp Leu Ala Asp Tyr Thr Ser Leu Ser Ile Lys Gln Ile
50 55 60

Asp Lys Gln Pro Phe Val Ser Arg Thr Pro Cys Asp Ile Leu Glu Ser
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<210> 1361

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<212> DNA

<213> Homo sapiens

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<210> 1362

<211> 1587

<212> PRT

<213> Homo sapiens

<400> 1362

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Gln	Tyr	Pro	Thr	Ser	Val	Asn	Ile	Thr	Leu	Arg	Leu	Gly	Lys	Ala	Tyr
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Leu	Asn	Thr	Phe	Gly	Asp	Asp	Ile	Phe	Lys	Asp	Pro	Lys	Val	Leu	Gln
				245					250					255	
Ser	Tyr	Tyr	Tyr	Ala	Val	Ser	Asp	Phe	Ser	Val	Gly	Gly	Arg	Cys	Lys

260 265 270
 Cys Asn Gly His Ala Ser Glu Cys Gly Pro Asp Val Ala Gly Gln Leu
 275 280 285
 Ala Cys Arg Cys Gln His Asn Thr Thr Gly Thr Asp Cys Glu Arg Cys
 290 295 300
 Leu Pro Phe Phe Gln Asp Arg Pro Trp Ala Arg Gly Thr Ala Glu Ala
 305 310 315 320
 Ala His Glu Cys Leu Pro Cys Asn Cys Ser Gly Arg Ser Glu Glu Cys
 325 330 335
 Thr Phe Asp Arg Glu Leu Phe Arg Ser Thr Gly His Gly Gly Arg Cys
 340 345 350
 His His Cys Arg Asp His Thr Ala Gly Pro His Cys Glu Arg Cys Gln
 355 360 365
 Glu Asn Phe Tyr His Trp Asp Pro Arg Met Pro Cys Gln Pro Cys Asp
 370 375 380
 Cys Gln Ser Ala Gly Ser Leu His Leu Gln Cys Asp Asp Thr Gly Thr
 385 390 395 400
 Cys Ala Cys Lys Pro Thr Val Thr Gly Trp Lys Cys Asp Arg Cys Leu
 405 410 415
 Pro Gly Phe His Ser Leu Ser Glu Gly Gly Cys Arg Pro Cys Thr Cys
 420 425 430
 Asn Pro Ala Gly Ser Leu Asp Thr Cys Asp Pro Arg Ser Gly Arg Cys
 435 440 445
 Pro Cys Lys Glu Asn Val Glu Gly Asn Leu Cys Asp Arg Cys Arg Pro
 450 455 460
 Gly Thr Phe Asn Leu Gln Pro His Asn Pro Ala Gly Cys Ser Ser Cys
 465 470 475 480
 Phe Cys Tyr Gly His Ser Lys Val Cys Ala Ser Thr Ala Gln Phe Gln
 485 490 495
 Val His His Ile Leu Ser Asp Phe His Gln Gly Ala Glu Gly Trp Trp
 500 505 510
 Ala Arg Ser Val Gly Gly Ser Glu His Ser Pro Gln Trp Ser Pro Asn
 515 520 525
 Gly Val Leu Leu Ser Pro Glu Asp Glu Glu Glu Leu Thr Ala Pro Gly
 530 535 540
 Lys Phe Leu Gly Asp Gln Arg Phe Ser Tyr Gly Gln Pro Leu Ile Leu
 545 550 555 560
 Thr Phe Arg Val Pro Pro Gly Asp Ser Pro Leu Pro Val Gln Leu Arg
 565 570 575
 Leu Glu Gly Thr Gly Leu Ala Leu Ser Leu Arg His Ser Ser Leu Ser
 580 585 590
 Gly Pro Gln Asp Ala Arg Ala Ser Gln Gly Gly Arg Ala Gln Val Pro
 595 600 605
 Leu Gln Glu Thr Ser Glu Asp Val Ala Pro Pro Leu Pro Pro Phe His
 610 615 620
 Phe Gln Arg Leu Leu Ala Asn Leu Thr Ser Leu Arg Leu Arg Val Ser
 625 630 635 640
 Pro Gly Pro Ser Pro Ala Gly Pro Val Phe Leu Thr Glu Val Arg Leu
 645 650 655
 Thr Ser Ala Arg Pro Gly Leu Ser Pro Pro Ala Ser Trp Val Glu Ile
 660 665 670
 Cys Ser Cys Pro Thr Gly Tyr Thr Gly Gln Phe Cys Glu Ser Cys Ala
 675 680 685
 Pro Gly Tyr Lys Arg Glu Met Pro Gln Gly Gly Pro Tyr Ala Ser Cys

690	695	700
Val Pro Cys Thr Cys	Asn Gln His Gly Thr Cys	Asp Pro Asn Thr Gly
705	710	715
Ile Cys Val Cys Ser	His His Thr Glu Gly Pro	Ser Cys Glu Arg Cys
	725	730
Leu Pro Gly Phe Tyr Gly	Asn Pro Phe Ala Gly	Gln Ala Asp Asp Cys
	740	745
Gln Pro Cys Pro Cys Pro	Gly Gln Ser Ala Cys	Thr Thr Ile Pro Glu
	755	760
Ser Gly Glu Val Val Cys	Thr His Cys Pro Pro	Gly Gln Arg Gly Arg
	770	775
Arg Cys Glu Val Cys Asp	Asp Gly Phe Phe Gly	Asp Pro Leu Gly Leu
785	790	795
Phe Gly His Pro Gln Pro	Cys His Gln Cys Gln	Cys Ser Gly Asn Val
	805	810
Asp Pro Asn Ala Val Gly	Asn Cys Asp Pro Leu	Ser Gly His Cys Leu
	820	825
Arg Cys Leu His Asn Thr	Thr Gly Asp His Cys	Glu His Cys Gln Glu
	835	840
Gly Phe Tyr Gly Ser Ala	Leu Ala Pro Arg Pro	Ala Asp Lys Cys Met
850	855	860
Pro Cys Ser Cys His Pro	Gln Gly Ser Val Ser	Glu Gln Met Pro Cys
865	870	875
Asp Pro Val Thr Gly Gln	Cys Ser Cys Leu Pro	His Val Thr Ala Arg
	885	890
Asp Cys Ser Arg Cys Tyr	Pro Gly Phe Phe Asp	Leu Gln Pro Gly Arg
	900	905
Gly Cys Arg Ser Cys Lys	Cys His Pro Leu Gly	Ser Gln Glu Asp Gln
	915	920
Cys His Pro Lys Thr Gly	Gln Cys Thr Cys Arg	Pro Gly Val Thr Gly
930	935	940
Gln Ala Cys Asp Arg Cys	Gln Leu Gly Phe Phe	Gly Ser Ser Ile Lys
945	950	955
Gly Cys Arg Ala Cys Arg	Cys Ser Pro Leu Gly	Ala Ala Ser Ala Gln
	965	970
Cys His Tyr Asn Gly Thr	Cys Val Cys Arg Pro	Gly Phe Glu Gly Tyr
	980	985
Lys Cys Asp Arg Cys His	Tyr Asn Phe Phe Leu	Thr Ala Asp Gly Thr
	995	1000
His Cys Gln Gln Cys Pro	Ser Cys Tyr Ala Leu	Val Lys Glu Glu Thr
1010	1015	1020
Ala Lys Leu Lys Ala Arg	Leu Thr Leu Thr Glu	Gly Trp Leu Gln Gly
1025	1030	1035
Ser Asp Cys Gly Ser Pro	Trp Gly Pro Leu Asp	Ile Leu Leu Gly Glu
	1045	1050
Ala Pro Arg Gly Asp Val	Tyr Gln Gly His His	Leu Leu Pro Gly Ala
	1060	1065
Arg Glu Ala Phe Leu Glu	Gln Met Met Gly Leu	Glu Gly Ala Val Lys
	1075	1080
Ala Ala Arg Glu Gln Leu	Gln Arg Leu Asn Lys	Gly Ala Arg Cys Ala
1090	1095	1100
Gln Ala Gly Ser Gln Lys	Thr Cys Thr Gln Leu	Ala Asp Leu Glu Ala
1105	1110	1115
Val Leu Glu Ser Ser Glu	Glu Glu Ile Leu His	Ala Ala Ala Ile Leu

1125 1130 1135
 Ala Ser Leu Glu Ile Pro Gln Glu Gly Pro Ser Gln Pro Thr Lys Trp
 1140 1145 1150
 Ser His Leu Ala Ile Glu Ala Arg Ala Leu Ala Arg Ser His Arg Asp
 1155 1160 1165
 Thr Ala Thr Lys Ile Ala Ala Thr Ala Trp Arg Ala Leu Leu Ala Ser
 1170 1175 1180
 Asn Thr Ser Tyr Ala Leu Leu Trp Asn Leu Leu Glu Gly Arg Val Ala
 1185 1190 1195 1200
 Leu Glu Thr Gln Arg Asp Leu Glu Asp Arg Tyr Gln Glu Val Gln Ala
 1205 1210 1215
 Ala Gln Lys Ala Leu Arg Thr Ala Val Ala Glu Val Leu Pro Glu Ala
 1220 1225 1230
 Glu Ser Val Leu Ala Thr Val Arg Gln Val Gly Ala Asp Thr Ala Pro
 1235 1240 1245
 Tyr Leu Ala Leu Leu Ala Ser Pro Gly Ala Leu Pro Gln Lys Ser Arg
 1250 1255 1260
 Ala Glu Asp Leu Gly Leu Lys Ala Lys Ala Leu Glu Lys Thr Val Ala
 1265 1270 1275 1280
 Ser Trp Gln His Met Ala Thr Glu Ala Ala Arg Thr Leu Gln Thr Ala
 1285 1290 1295
 Ala Gln Ala Thr Leu Arg Gln Thr Glu Pro Leu Thr Met Ala Arg Ser
 1300 1305 1310
 Arg Leu Thr Ala Thr Phe Ala Ser Gln Leu His Gln Glu Ala Arg Ala
 1315 1320 1325
 Ala Leu Thr Gln Ala Ser Ser Ser Val Gln Ala Ala Thr Val Thr Val
 1330 1335 1340
 Met Gly Ala Arg Thr Leu Leu Ala Asp Leu Glu Gly Met Lys Leu Gln
 1345 1350 1355 1360
 Phe Pro Arg Pro Lys Asp Gln Ala Ala Leu Gln Arg Lys Ala Asp Ser
 1365 1370 1375
 Val Ser Asp Arg Leu Leu Ala Asp Thr Arg Lys Lys Thr Lys Gln Ala
 1380 1385 1390
 Glu Arg Met Leu Gly Asn Ala Ala Pro Leu Ser Ser Ser Ala Lys Lys
 1395 1400 1405
 Lys Gly Arg Glu Ala Glu Val Leu Ala Lys Asp Ser Ala Lys Leu Ala
 1410 1415 1420
 Lys Ala Leu Leu Arg Glu Arg Lys Gln Ala His Arg Arg Ala Ser Arg
 1425 1430 1435 1440
 Leu Thr Ser Gln Thr Gln Ala Thr Leu Gln Gln Ala Ser Gln Gln Val
 1445 1450 1455
 Leu Ala Ser Glu Ala Arg Arg Gln Glu Leu Glu Glu Ala Glu Arg Val
 1460 1465 1470
 Gly Ala Gly Leu Ser Glu Met Glu Gln Gln Ile Arg Glu Ser Arg Ile
 1475 1480 1485
 Ser Leu Glu Lys Asp Ile Glu Thr Leu Ser Glu Leu Leu Ala Arg Leu
 1490 1495 1500
 Gly Ser Leu Asp Thr His Gln Ala Pro Ala Gln Ala Leu Asn Glu Thr
 1505 1510 1515 1520
 Gln Trp Ala Leu Glu Arg Leu Arg Leu Gln Leu Gly Ser Pro Gly Ser
 1525 1530 1535
 Leu Gln Arg Lys Leu Ser Leu Leu Glu Gln Glu Ser Gln Gln Glu
 1540 1545 1550
 Leu Gln Ile Gln Gly Phe Glu Ser Asp Leu Ala Glu Ile Arg Ala Asp

1555 1560 1565
 Lys Gln Asn Leu Glu Ala Ile Leu His Ser Leu Pro Glu Asn Cys Ala
 1570 1575 1580
 Ser Trp Gln
 1585

<210> 1363
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1363
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 60
 gaaggcgcca ccgaagacaa ggacgtagag gaaagccgcg ctgtgctcga aggcgcagca
 120
 ggaatctgcg aaaccgacaa agatgcggct gtttgagtgg atgtgaagga agatgcaggt
 180
 gtctcatcgg cggggccacc atgaacaacc cttcttgatg ccccgtaggt gacgcgctca
 240
 cacacgacat gcacaacaaa taaatcgcaa agcacagagg gacaatcgaa tacaccttga
 300
 cccatgcact tgcgtgcctg gaggcattggc taccaggcaa tcccctcatt tccagaatga
 360
 gcctgttttt gaaagcgact aggggaagttc ag
 392

<210> 1364
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1364
 Met Arg Gly Leu Pro Gly Ser His Ala Ser Arg His Ala Ser Ala Trp
 1 5 10 15
 Val Lys Val Tyr Ser Ile Val Pro Leu Cys Phe Ala Ile Tyr Leu Leu
 20 25 30
 Cys Met Ser Cys Val Ser Ala Ser Pro Thr Gly His Gln Glu Gly Leu
 35 40 45
 Phe Met Val Ala Pro Pro Met Arg His Leu His Leu Pro Ser His Pro
 50 55 60
 Leu Lys Gln Pro His Leu Cys Arg Phe Arg Arg Phe Leu Leu Arg Leu
 65 70 75 80
 Arg Ala Gln Arg Gly Phe Pro Leu Arg Pro Cys Leu Arg Trp Arg Leu
 85 90 95
 Arg Leu Gln Trp Arg Leu Tyr Pro
 100

<210> 1365
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 1365

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 ctacagcggg ccctgggtca ggatcgccaa gaggcgccct ggaatgaggt ggatgaggtc
 120
 tggcccaatg tcttcatagc tgagaagagt gtggctgtga acaaggggag gctgaagagg
 180
 ctgggaatca cccacattct gaatgctgcg catggcaccg gcgtttacac tggccccgaa
 240
 ttctacactg gcctggagat ccagtacctg ggtgtagagg tggatgactt tcctgaggtg
 300
 gacatttccc agcatttccg gaaggcgtct gagttcctgg atgaggcgct gctgacttac
 360
 agaggggaaag tcctggtcag cagcgaaatg ggcacagcc ggtcagcagt gctgggtggtc
 420
 gctacctga tgatcttcca caacatggcc a
 451

<210> 1366

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1366

Xaa	Arg	Val	Arg	Glu	Lys	Met	Asp	Asp	Thr	Ser	Leu	Tyr	Asn	Thr	Pro
1				5					10					15	
Cys	Val	Leu	Asp	Leu	Gln	Arg	Ala	Leu	Val	Gln	Asp	Arg	Gln	Glu	Ala
			20					25					30		
Pro	Trp	Asn	Glu	Val	Asp	Glu	Val	Trp	Pro	Asn	Val	Phe	Ile	Ala	Glu
		35				40						45			
Lys	Ser	Val	Ala	Val	Asn	Lys	Gly	Arg	Leu	Lys	Arg	Leu	Gly	Ile	Thr
	50				55						60				
His	Ile	Leu	Asn	Ala	Ala	His	Gly	Thr	Gly	Val	Tyr	Thr	Gly	Pro	Glu
65				70					75					80	
Phe	Tyr	Thr	Gly	Leu	Glu	Ile	Gln	Tyr	Leu	Gly	Val	Glu	Val	Asp	Asp
			85					90						95	
Phe	Pro	Glu	Val	Asp	Ile	Ser	Gln	His	Phe	Arg	Lys	Ala	Ser	Glu	Phe
		100					105						110		
Leu	Asp	Glu	Ala	Leu	Leu	Thr	Tyr	Arg	Gly	Lys	Val	Leu	Val	Ser	Ser
		115				120						125			
Glu	Met	Gly	Ile	Ser	Arg	Ser	Ala	Val	Leu	Val	Val	Ala	Tyr	Leu	Met
	130					135						140			
Ile	Phe	His	Asn	Met	Ala										
145					150										

<210> 1367

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1367

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 cgccgatacg cgccaacgcc gtagaccgag aacgctggct caccggcgcc gctgtactgc
 120

tctgtcgtcgc attgctgctg gtcacgtcgc cactgcccgt cagcgcactc gtcggccaga
 180
 gctttcttga ccgcgaaggc gccttcgtcg gcctcgccaa cttegtcgc tacctcgaca
 240
 acccgcacct ggtccagtcc gccttcaaca gcctctggct ggccgcgac agcgccgtca
 300
 tctgcaccgc catcgccctac gtctacgcgt
 330

<210> 1368

<211> 82

<212> PRT

<213> Homo sapiens

<400> 1368

Thr	Ala	Asn	Ala	Gly	Ser	Pro	Ala	Pro	Leu	Tyr	Cys	Ser	Ser	Ser	His
1				5				10					15		
Cys	Cys	Trp	Ser	Ser	Ser	His	Cys	Pro	Ser	Ala	His	Ser	Ser	Ala	Arg
			20					25					30		
Ala	Ser	Ser	Thr	Ala	Lys	Ala	Pro	Ser	Ser	Ala	Ser	Pro	Thr	Ser	Leu
		35					40					45			
Ala	Thr	Ser	Thr	Thr	Pro	Pro	Trp	Ser	Ser	Pro	Pro	Ser	Thr	Ala	Ser
	50					55					60				
Gly	Trp	Pro	Arg	Ser	Ala	Pro	Ser	Ser	Ala	Pro	Pro	Ser	Pro	Thr	Ser
65					70					75					80
Thr	Arg														

<210> 1369

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1369

cgccagttca tctataagaa catcatccac agtgcagcac caatgggcga cgagatggct
 60
 catcacctgt acgtactgca ggctctcatg ctggggctgc tggagccgcg catgcggacg
 120
 ccctggacc cctacagcca ggagcagcgg gagcagctgc aggtcctacg ccaggctgcc
 180
 ttcgaggtgg agggggagtc ctcggggtgcc gggctaagtg ctgaccgtcg ccgttcctc
 240
 tgtgcccagag agttccgcaa actgggcttt tctaacagca acccagcaca ggacctggag
 300
 cgcgtgcccc ccggtctgct ggccctggac aacatgttgt acttctccag aaacgc
 356

<210> 1370

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1370

Met Gly Asp Glu Met Ala His His Leu Tyr Val Leu Gln Ala Leu Met

```

      1           5           10           15
Leu Gly Leu Leu Glu Pro Arg Met Arg Thr Pro Leu Asp Pro Tyr Ser
      20           25           30
Gln Glu Gln Arg Glu Gln Leu Gln Val Leu Arg Gln Ala Ala Phe Glu
      35           40           45
Val Glu Gly Glu Ser Ser Gly Ala Gly Leu Ser Ala Asp Arg Arg Arg
      50           55           60
Ser Leu Cys Ala Arg Glu Phe Arg Lys Leu Gly Phe Ser Asn Ser Asn
      65           70           75           80
Pro Ala Gln Asp Leu Glu Arg Val Pro Pro Gly Leu Leu Ala Leu Asp
      85           90           95
Asn Met Leu Tyr Phe Ser Arg Asn
      100

```

<210> 1371

<211> 648

<212> DNA

<213> Homo sapiens

<400> 1371

```

tcgcgagcac actccagcct ctgggctgcc tttttcaggt tttgcaaact ggctatgaat
60
tggtcagcgg ttggattagc cagttctgca gactggctca caccagacc atctggaccg
120
cttatagaga agacatgttc caagtacctt ctttcttttg tctgcttttc tcatgggtac
180
tttgccctct aagaagccta ctttctcttt ttcctctcct cctctcccta tttctctttg
240
ttgagagagc agtcagatta acccaacaac tcttggagtg ccttgggtcac ctgagagcat
300
ggaaagtcca tgccttcacc agagtaatga ctaccatttc tccaaaactc tctcatgcc
360
atccgatagg cagtattgat cagaagggga aatctagtgt gttaaaattg ataaaccagc
420
ttaagttata cctacaataa aagaccagc cttagcccat ggctgaatgt tgaatactgt
480
tgcattggaaa tttgggattt ctagttagag gctttataaa ggtagaatca tgcagacaca
540
tatacctgga aatattcgga acattctatt agcagaaatg caatgtagga agcttattgg
600
ttctagaaga atgtgtcatt gtcagtaatt ggaattactg acagatct
648

```

<210> 1372

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1372

```

Met Phe Gln Val Pro Ser Phe Leu Cys Leu Leu Phe Ser Trp Val Leu
1           5           10           15
Cys Pro Leu Arg Ser Leu Leu Ser Ser Phe Pro Leu Leu Leu Ser Leu
      20           25           30
Phe Leu Phe Val Glu Arg Ala Val Arg Leu Thr Gln Gln Leu Leu Glu

```

```

      35              40              45
Cys Leu Gly His Leu Arg Ala Trp Lys Val His Ala Leu Thr Arg Val
      50              55              60
Met Thr Thr Ile Ser Pro Lys Leu Ser Ser Cys His Pro Ile Gly Ser
      65              70              75              80
Ile Asp Gln Lys Gly Lys Ser Ser Val Leu Lys Leu Ile Asn Gln Leu
      85              90              95
Lys Leu Tyr Leu Gln
      100

```

<210> 1373
 <211> 369
 <212> DNA
 <213> Homo sapiens

```

<400> 1373
caattggttt tccccaaactt tctacttgca aagcaacttc ttagacctgg ggtcctctct
60
tgcaggcgcc ctgcatggca gagaactttt tccaccacaa ccttcgtgta acaggcagtt
120
acatgggttt catgggtcga catgggttcc gtgtcctgct tgccgggcct gagctgtttg
180
tcaggtgtac aaccgagaac cttgcagacc agaatccaag actccgcagc atgtgtgtgc
240
cggggcgga cagcagctgt tggaggagaa agccatcagt gtatttagag gcaaagggct
300
tcctaaatcg aggctgtgca ggctcctga aagtccttac ccaagcttcc gaggtaaatc
360
ctctccgca
369

```

<210> 1374
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1374
Met Ala Glu Asn Phe Phe His His Asn Leu Arg Val Thr Gly Ser Tyr
  1              5              10              15
Met Gly Phe Met Gly Arg His Gly Phe Arg Val Leu Leu Ala Gly Pro
      20              25              30
Glu Leu Phe Val Arg Cys Thr Thr Glu Asn Leu Ala Asp Gln Asn Pro
      35              40              45
Arg Leu Arg Ser Met Cys Val Pro Gly Arg Asp Thr Ser Cys Trp Arg
      50              55              60
Arg Lys Pro Ser Val Tyr Leu Glu Ala Lys Gly Phe Leu Asn Arg Gly
      65              70              75              80
Cys Ala Gly Leu Leu Lys Val Leu Thr Gln Ala Ser Glu Val Asn Pro
      85              90              95
Leu Arg

```

<210> 1375
 <211> 282

<212> DNA

<213> Homo sapiens

<400> 1375

nacgcgttcg accgcgccac gcgcggggcac gttatcgact acatcgactt tcacctgcac
 60
 ggctggcact ggcccgcctt caacatcgct gacatggcca tcgtgggcgg ggcgatcgcg
 120
 ctggtggccc agtcgttcat gagegtggag aaccggccg ccacaaagga gtcccagtga
 180
 cattgggacg atccggaaat tcgcaatgca cacggtgcag gacaccaatc tgaagagaac
 240
 ggccccagc atgagcggcc gcggcttggc cctcatgcta gc
 282

<210> 1376

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1376

Xaa	Ala	Phe	Asp	Arg	Ala	Thr	Arg	Gly	His	Val	Ile	Asp	Tyr	Ile	Asp
1				5				10					15		
Phe	His	Leu	His	Gly	Trp	His	Trp	Pro	Ala	Phe	Asn	Ile	Ala	Asp	Met
		20						25				30			
Ala	Ile	Val	Gly	Gly	Ala	Ile	Ala	Leu	Val	Ala	Gln	Ser	Phe	Met	Ser
		35				40						45			
Val	Glu	Asn	Pro	Ala	Ala	Thr	Lys	Glu	Ser	Gln					
	50					55									

<210> 1377

<211> 6306

<212> DNA

<213> Homo sapiens

<400> 1377

tagtaagaca ggtgccttca gttcactctc agtaaggggc tggttgcctg catgagtgtg
 60
 tgctctgtgt cactgtggat tggagttgaa aaagcttgac tggcgtcatt caggagctgg
 120
 atggcgtggg acatgtgcaa ccaggactct gagtctgtat ggagtgcacat cgagtgtgct
 180
 gctctggttg gtgaagacca gcctctttgc ccagatcttc ctgaacttga tctttctgaa
 240
 ctagatgtga acgacttgga tacagacagc tttctgggtg gactcaagtg gtgcagtgcac
 300
 caatcagaaa taatatccaa tcagtacaac aatgagcctt caaacatatt tgagaagata
 360
 gatgaagaga atgaggcaaa cttgctagca gtcctcacag agacactaga cagtctccct
 420
 gtggatgaag acggattgcc ctcatcttgat gcgctgacag atggagacgt gaccactgac
 480
 aatgaggcta gtccttcctc catgcctgac ggcacccctc caccacagga ggcagaagag
 540

ccgtctctac ttaagaagct cttactggca ccagccaaca ctcagctaag ttataatgaa
600
tgcagtgggc tcagtagcca gaaccatgca aatcacaatc acaggatcag aacaaaccct
660
gcaattgtta agactgagaa ttcattggagc aataaagcga agagtatttg tcaacagcaa
720
aagccacaaa gacgtccctg ctcggagctt ctcaaatatc tgaccacaaa cgatgaccct
780
cctcacacca aaccacacaga gaacagaaac agcagcagag acaaatgcac ctccaaaaag
840
aagtcacaca cacagtgcga gtcacaacac ttacaagcca aaccaacaac tttatctctt
900
cctctgaccc cagagtccac aaatgacccc aagggttccc catttgagaa caagactatt
960
gaacgcacct taagtgtgga actctctgga actgcaggcc taactccacc caccactcct
1020
cctcataaag ccaaccaaga taaccctttt agggcttctc caaagctgaa gtcctcttgc
1080
aagactgtgg tgccaccacc atcaaagaag cccaggtaca gtgagtcttc tggtagacaa
1140
ggcaataact ccaccaagaa agggccggag caatccgagt tgtatgcaca actcagcaag
1200
tcctcagtc tcaactggtg acacgaggaa aggaagacca agcggcccag tctgaggctg
1260
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1320
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1440
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1500
gagctgaaca agcacttcgg tcatcccagt caagctgttt ttgacgacga agcagacaag
1560
accggtgaac tgaggagacag tgatttcagt aatgaacaat tctccaaact acctatgttt
1620
ataaattcag gactagccat ggatggcctg tttgatgaca gcgaagatga aagtgataaa
1680
ctgagctacc cttgggatgg cagcgaatcc tattcattgt tcaatgtgtc tccttcttgt
1740
tcttctttta actctccatg tagagattct gtgtcaccac ccaaatacctt attttctcaa
1800
agaccccaaa ggatgcgctc tcgttcaagg tccttttctc gacacaggctc gtgttcccga
1860
tcaccatatt ccagggtcaag atcaaggctc ccaggcagta gatcctcttc aagatcctgc
1920
tattactatg agtcaagcca ctacagacac cgcacgcacc gaaattctcc cttgtatgtg
1980
agatcacgtt caagatcgcc ctacagccgt cggcccagggt atgacagcta cgaggaatat
2040
cagcagcaga ggctgaagag ggaagaatat cgcagagagt atgagaagcg agagtctgag
2100
agggccaagc aaaggggagag gcagaggcag aaggcaattg aagagcgccg tgtgatttat
2160

gtcggtaaaa tcagacctga cacaacacgg acagaactga gggaccgttt tgaagttttt
2220
ggtgaaattg aggagtgcac agtaaactctg cgggatgatg gagacagcta tggtttcatt
2280
acctaccgtt atacctgtga tgcttttgct gctcttgaaa atggatacac tttgcgcagg
2340
tcaaacgaaa ctgactttga gctgtacttt tgtggacgca agcaattttt caagtctaac
2400
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<210> 1378

<211> 798

<212> PRT

<213> Homo sapiens

<400> 1378
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 35 40 45
 Asp Ser Phe Leu Gly Gly Leu Lys Trp Cys Ser Asp Gln Ser Glu Ile
 50 55 60
 Ile Ser Asn Gln Tyr Asn Asn Glu Pro Ser Asn Ile Phe Glu Lys Ile
 65 70 75 80
 Asp Glu Glu Asn Glu Ala Asn Leu Leu Ala Val Leu Thr Glu Thr Leu
 85 90 95
 Asp Ser Leu Pro Val Asp Glu Asp Gly Leu Pro Ser Phe Asp Ala Leu
 100 105 110
 Thr Asp Gly Asp Val Thr Thr Asp Asn Glu Ala Ser Pro Ser Ser Met

		115					120					125				
Pro	Asp	Gly	Thr	Pro	Pro	Pro	Gln	Glu	Ala	Glu	Glu	Pro	Ser	Leu	Leu	
	130					135					140					
Lys	Lys	Leu	Leu	Leu	Ala	Pro	Ala	Asn	Thr	Gln	Leu	Ser	Tyr	Asn	Glu	
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Cys	Ser	Gly	Leu	Ser	Thr	Gln	Asn	His	Ala	Asn	His	Asn	His	Arg	Ile	
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Arg	Thr	Asn	Pro	Ala	Ile	Val	Lys	Thr	Glu	Asn	Ser	Trp	Ser	Asn	Lys	
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Ala	Lys	Ser	Ile	Cys	Gln	Gln	Gln	Lys	Pro	Gln	Arg	Arg	Pro	Cys	Ser	
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Glu	Leu	Leu	Lys	Tyr	Leu	Thr	Thr	Asn	Asp	Asp	Pro	Pro	His	Thr	Lys	
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Lys	Ser	His	Thr	Gln	Ser	Gln	Ser	Gln	His	Leu	Gln	Ala	Lys	Pro	Thr	
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		275					280					285				
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	290					295					300					
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Lys	Thr	Val	Val	Pro	Pro	Pro	Ser	Lys	Lys	Pro	Arg	Tyr	Ser	Glu	Ser	
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			340					345					350			
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Ser	Gln	Glu	Leu	Gln	Asp	Ser	Arg	Gln	Leu	Glu	Asn	Lys	Asp	Val	Ser	
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Ser	Asp	Trp	Gln	Gly	Gln	Ile	Cys	Ser	Ser	Thr	Asp	Ser	Asp	Gln	Cys	
			420					425					430			
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 565 570 575
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 580 585 590
 Ser Arg Ser Ser Ser Arg Ser Cys Tyr Tyr Tyr Glu Ser Ser His Tyr
 595 600 605
 Arg His Arg Thr His Arg Asn Ser Pro Leu Tyr Val Arg Ser Arg Ser
 610 615 620
 Arg Ser Pro Tyr Ser Arg Arg Pro Arg Tyr Asp Ser Tyr Glu Glu Tyr
 625 630 635 640
 Gln His Glu Arg Leu Lys Arg Glu Glu Tyr Arg Arg Glu Tyr Glu Lys
 645 650 655
 Arg Glu Ser Glu Arg Ala Lys Gln Arg Glu Arg Gln Arg Gln Lys Ala
 660 665 670
 Ile Glu Glu Arg Arg Val Ile Tyr Val Gly Lys Ile Arg Pro Asp Thr
 675 680 685
 Thr Arg Thr Glu Leu Arg Asp Arg Phe Glu Val Phe Gly Glu Ile Glu
 690 695 700
 Glu Cys Thr Val Asn Leu Arg Asp Asp Gly Asp Ser Tyr Gly Phe Ile
 705 710 715 720
 Thr Tyr Arg Tyr Thr Cys Asp Ala Phe Ala Ala Leu Glu Asn Gly Tyr
 725 730 735
 Thr Leu Arg Arg Ser Asn Glu Thr Asp Phe Glu Leu Tyr Phe Cys Gly
 740 745 750
 Arg Lys Gln Phe Phe Lys Ser Asn Tyr Ala Asp Leu Asp Ser Asn Ser
 755 760 765
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 770 775 780
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<210> 1379
 <211> 590
 <212> DNA
 <213> Homo sapiens

<400> 1379
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tgtggccgcg tcnaccacc tctgccctcg gtgtccccgc cgtgtggccg cgtnaccaca
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<210> 1380

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1380

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		20						25					30		
Cys	Pro	Cys	Arg	Val	Ala	Ala	Ser	Pro	Ile	Ser	Ala	Leu	Gly	Val	Pro
		35					40					45			
Ala	Leu	Trp	Pro	Arg	His	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys
	50					55					60				
Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro	Ser	Glu	Ser	Leu	Pro	Cys	Gly	Arg
65					70					75				80	
Val	Xaa	Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa
				85					90					95	
Pro	Pro	Leu	Pro	Ser	Val	Ser	Leu	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Pro
			100					105					110		
Leu	Pro	Ser	Val	Ser	Pro	Pro	Cys	Gly	Arg	Val	Xaa	Pro	Ser	Leu	Pro
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<210> 1381

<211> 433

<212> DNA

<213> Homo sapiens

<400> 1381

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<210> 1382

<211> 123
 <212> PRT
 <213> Homo sapiens

<400> 1382
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 Gly Arg Ser Thr Leu Thr Ala Leu Ala Lys His Ser Phe Pro Cys Pro
 35 40 45
 Gly Cys His Gln Arg Gly Gly Arg Ser His Arg Ser Ala Leu Val Ser
 50 55 60
 Ala Gly Leu Lys Trp Gly Phe Ser Phe Cys Val Glu Gln Phe Ile Arg
 65 70 75 80
 Gly Leu Ile Ser Lys Pro Arg His Trp Pro Cys Thr Cys Ser Ser Arg
 85 90 95
 Lys Pro Asn Ser Cys Leu Trp Ala Pro Ala Tyr Arg Gln Pro Asn Gly
 100 105 110
 Leu Ala Pro Ala Lys Gly Leu Phe Gly Asp Leu
 115 120

<210> 1383
 <211> 906
 <212> DNA
 <213> Homo sapiens

<400> 1383
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 120
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 180
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 300
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 360
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 420
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 720
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 cggccg
 906

<210> 1384
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1384
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 Met Ala Pro Met Ser Thr Arg Val Ser Ala Ala Gly Pro Gly Arg Pro
 35 40 45
 Thr Ala Ser Ser Leu Leu Pro Leu Thr Asn Thr Pro Gln Thr Pro His
 50 55 60
 Met Ser Ser Pro Thr Pro Pro Arg Ala Met Val Leu Thr Lys Gln Arg
 65 70 75 80
 Pro Ser Gln Thr Gln Ser Cys Gly Pro Arg Val Ser Arg Arg Ala Asp
 85 90 95
 Asn

<210> 1385
 <211> 210
 <212> DNA
 <213> Homo sapiens

<400> 1385
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 gtggcgtgta tgcattggtgt gtgcacgtgt gcactgtgtg tggggtgtat gncatggtgg
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 gtgcacatat gcactggggg gtgtgtatgc
 210

<210> 1386
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 1386
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 20 25 30
 Val Met Cys Thr Cys Ala Leu Cys Val Ala Cys Met His Gly Val Cys

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      50          55          60
Thr Gly Gly Cys Val Cys
65          70

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<210> 1387
 <211> 521
 <212> DNA
 <213> Homo sapiens

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<400> 1387
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360
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420
cgatgagatc gatgttgccc ttggagtggg aactcgggtc gaaggtgtac ccgatgaact
480
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521

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<210> 1388
 <211> 103
 <212> PRT
 <213> Homo sapiens

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<400> 1388
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Lys Gly Gln Val Val Gln Ala Glu Gly Val Ser Gly Cys Gly Lys His
20     25     30
Ser Pro Gly Gly Gln His Thr Glu Ala Gly Glu Asp Glu Gly Val Val
35     40     45
Ala Ala Asp Gly Ser Ser Asp Ser Thr Ala Gly Asp Gly Gly Lys Glu
50     55     60
Ser Glu Asp Glu Asp Ser Asp Arg Gly Gly Glu His Arg Cys Ser Phe
65     70     75     80
Val Arg Ala Gly Tyr Pro Ala Ile Cys His Pro His Ala Ala Thr Gly
85     90     95
Ala Ala Phe Ser Gly His Pro
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<210> 1389
 <211> 4013

<212> DNA

<213> Homo sapiens

<400> 1389

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240
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420
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480
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600
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780
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<210> 1390

<211> 1156

<212> PRT

<213> Homo sapiens

<400> 1390

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Thr	Ile	Ile	Ser	Thr	Ile	Pro	Ser	Thr	Ala	Met	His	Thr	Arg	Ser	Thr
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Tyr	Gly	Ala	Asp	Ala	Gly	Asp	Leu	Glu	Phe	Val	Arg	Arg	Thr	Val	Asp
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Phe	Thr	Ser	Pro	Leu	Phe	Lys	Pro	Ala	Thr	Gly	Phe	Pro	Leu	Gly	Ser
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Ser	Leu	Arg	Asp	Ser	Leu	Tyr	Phe	Thr	Asp	Asn	Gly	Gln	Ile	Ile	Phe
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Pro	Glu	Ser	Asp	Tyr	Gln	Ile	Phe	Ser	Tyr	Pro	Asn	Pro	Leu	Pro	Thr
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Gly	Phe	Thr	Gly	Arg	Asp	Pro	Val	Ala	Leu	Val	Ala	Pro	Phe	Trp	Asp

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 Asp Ala Asp Phe Ser Thr Gly Arg Gly Thr Thr Phe Tyr Gln Glu Tyr
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 Glu Thr Phe Tyr Gly Glu His Ser Leu Leu Val Gln Gln Ala Glu Ser
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 Trp Ile Arg Lys Ile Thr Asn Asn Gly Gly Tyr Lys Ala Arg Trp Ala
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 195 200 205
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 245 250 255
 Gly Tyr Phe Glu Asn Ser Pro Leu Met Ser Gln Pro Val Trp Glu Arg
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 Tyr Arg Pro Asp Arg Phe Leu Asn Ser Asn Ser Gly Leu Gln Gly Leu
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 Gln Phe Tyr Arg Leu His Arg Glu Glu Arg Pro Asn Tyr Arg Leu Glu
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 Asn Gln Val Ser Cys Pro Cys Ser Trp Gln Gln Gly Arg Arg Asp Leu
 325 330 335
 Arg Phe Gln Pro Val Ser Ile Gly Arg Trp Gly Leu Gly Ser Arg Gln
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 Leu Cys Ser Phe Thr Ser Trp Arg Gly Gly Val Cys Cys Ser Tyr Gly
 355 360 365
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 Lys Pro Tyr Leu Cys Ala Leu Tyr Gln Gln Arg Arg Pro His Val Gly
 405 410 415
 Cys Ala Thr Tyr Arg Pro Pro Gln Pro Ala Trp Met Phe Gly Asp Pro
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 His Ile Thr Thr Leu Asp Gly Val Ser Tyr Thr Phe Asn Gly Leu Gly
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 Asp Phe Leu Leu Val Gly Ala Gln Asp Gly Asn Ser Ser Phe Leu Leu
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 Gln Gly Arg Thr Ala Gln Thr Gly Ser Ala Gln Ala Thr Asn Phe Ile
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 Ala Phe Ala Ala Gln Tyr Arg Ser Ser Ser Leu Gly Pro Val Thr Val
 485 490 495
 Gln Trp Leu Leu Glu Pro His Asp Ala Ile Arg Val Leu Leu Asp Asn
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 Gln Thr Val Thr Phe Gln Pro Asp His Glu Asp Gly Gly Gly Gln Glu
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 Thr Phe Asn Ala Thr Gly Val Leu Leu Ser Arg Asn Gly Ser Glu Val
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 Asn Ile Leu His Ala Ser Ala Ser Leu Pro Pro Glu Tyr Gln Asn Arg

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Gly	Lys	Arg	Asn	Asp	Gln	Leu	Pro	Ser	Asn	Phe	Thr	Pro	Val	Phe	Tyr				
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Cys	Asp	Gly	Asp	Ser	Ser	Cys	Ile	Tyr	Asp	Thr	Leu	Ala	Leu	Arg	Asn				
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Glu	Leu	Phe	Glu	Asn	Gly	Thr	Leu	Leu	Trp	Thr	Pro	Lys	Ser	Leu	Glu				
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Pro	Phe	Thr	Leu	Glu	Ile	Leu	Ala	Arg	Ser	Ala	Lys	Ile	Gly	Leu	Ala				
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Arg Gln Lys Ile Gly Ile Val Phe Gln Gln Trp Asn Ala Phe Pro His
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Leu Thr Val Leu Glu Asn Val Met Leu Ala Pro Arg Lys Val Leu Gly
      35           40           45
Lys Ser Lys Gln Lys Ala Glu Glu Leu Ala Val Arg Gln Leu Thr His
      50           55           60
Val Gly Leu Ser Asp Lys Leu Lys Thr Phe Pro Ala Xaa Leu Ser Gly
      65           70           75           80
Gly Gln Gln Gln Arg Met Ala Ile Ala Arg Ala Leu Ala Met Ser Pro
      85           90           95
Asp Tyr Met Leu Phe Asp Glu Ala Thr Ser Ala Leu Asp Pro Gln Leu
      100          105          110
Val Gly Glu Val Leu Asp Thr Met Arg Met Leu Ala Glu Asp Gly Met
      115          120          125
Thr Met Val Leu Val Thr His Glu Ile Arg Phe Ala Arg Asp Val Ser
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<210> 1393

<211> 309

<212> DNA

<213> Homo sapiens

<400> 1393

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<210> 1394

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1394

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      20           25           30
Ser Leu Tyr Gly Ala Val Lys Met Trp Ala Leu Leu Arg Arg Gln Gly
      35           40           45
Ile Arg Trp Pro Ala Ala Xaa Val Glu Arg Leu Met Arg Asp Asn Arg
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Trp Arg Gly Val Thr Arg Arg Lys Lys Val Xaa His His His Arg

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<210> 1395

<211> 347

<212> DNA

<213> Homo sapiens

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<210> 1396

<211> 95

<212> PRT

<213> Homo sapiens

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			20					25					30	Ala
Thr	Arg	Ala	Leu	Ala	Gly	Arg	Val	Ser	Val	Gly	Glu	Ile	Pro	Ser
		35					40					45		Val
Ala	Leu	Glu	His	Val	Ala	Asp	Asp	Val	Glu	Val	Leu	Ala	Gln	Ala
	50					55					60			Arg
Arg	Ala	His	Ala	Val	Gly	Gly	Ser	Val	Ser	Asp	Ala	Leu	Ile	Ala
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<210> 1397

<211> 308

<212> DNA

<213> Homo sapiens

<400> 1397

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180
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 308

<210> 1398
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1398
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 Arg Leu Ser Lys Arg Glu Glu Gly Phe Thr Gln Trp Val Arg Ala Ala
 35 40 45
 Gln Asp Asp Gly Arg Leu Ser Cys Ser Asp Pro Ala Phe Ala Ala His
 50 55 60
 Gln Ile Gln Ser Leu Leu Lys Ala Phe Ala Phe Trp Pro Gln Ile Thr
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 Leu Gly Gln Pro Val Leu Asp Ala Ala Ser Gln Ala Asn
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<210> 1399
 <211> 539
 <212> DNA
 <213> Homo sapiens

<400> 1399
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 180
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 300
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 360
 tacttttaaa tcttgatcatg taatttcaac acataatttg tggcacttta gtttttttac
 420
 cttttatagt ttaataactt atacatgtac atgcttaaaa tgtcaaacaa tacaaatggg
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<210> 1400
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1400

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Ile Thr His Pro Val Gly Val Leu Asn Phe Phe Ser Arg Pro Thr
           20           25           30
Phe Lys Ser Cys His Val Ile Ser Thr His Asn Leu Trp His Phe Ser
           35           40           45
Phe Phe Thr Leu Tyr Ser Leu Ile Thr Tyr Thr Cys Thr Cys Leu Lys
           50           55           60
Cys Gln Thr Ile Gln Met Gly Thr Lys Lys Ile Ala Ser Pro Ser Val
65           70           75           80
Asn Pro Ser Phe Cys Ser Pro Leu His Ala
           85           90

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<210> 1401

<211> 653

<212> DNA

<213> Homo sapiens

<400> 1401

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<210> 1402

<211> 217

<212> PRT

<213> Homo sapiens

<400> 1402

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           20           25           30
Xaa Ser Ser Pro Ala Arg Arg Trp Xaa Leu Gly Phe Asp Gly Arg Val

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Ser Leu Leu Leu Gly Ala Ile Leu Ile Val Thr Gly Pro Thr Val Ile
   50          55          60
Asn Pro Ile Leu Arg Gln Leu Arg Pro Thr Arg Arg Val Ser Ala Leu
65          70          75          80
Leu Arg Trp Glu Gly Ile Val Val Asp Pro Leu Gly Ala Ile Leu Ala
          85          90          95
Leu Leu Val Tyr Gln Ala Ile Thr Ser Ile Asp Arg Ser Ser Ile Gly
          100          105          110
Gln Gly Val Leu Asn Leu Gly Leu Thr Leu Leu Val Gly Leu Leu Phe
          115          120          125
Ala Gly Pro Ile Gly Trp Ile Val Thr Ala Met Met Lys Arg His Leu
          130          135          140
Ile Pro Asp Phe Leu Gln Gly Val Ile Phe Val Gly Val Ala Val Gly
145          150          155          160
Thr Cys Val Gly Ala Asn Val Ile Arg Glu Glu Ser Gly Leu Val Ala
          165          170          175
Val Thr Met Leu Gly Ile Tyr Leu Ala Asn Gln Arg Asn Leu Glu Leu
          180          185          190
Glu Pro Val Ile Glu Phe Lys Glu His Leu Gln Val Leu Leu Val Gly
          195          200          205
Val Leu Phe Ile Met Leu Ala Gly Arg
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<210> 1403

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1403

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120
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ttttccacca actgatgtct agccagaaga actttttctg catcagtctc aatatcaacc
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<210> 1404

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1404

```

Met Lys Gln Leu Gln Glu Ala Leu Val Asp Ile Glu Thr Asp Ala Glu
  1          5          10          15
Lys Val Leu Leu Ala Arg His Gln Leu Val Glu Asn Asp Lys Ile Arg

```

```

      20      25      30
Asn Gly Asn Arg Glu Ala Leu Thr Ala Leu Arg Lys Gln Ala Arg Thr
      35      40      45
Ser Lys Thr Ser Val Pro Ser Pro Phe Glu Val Ile Met Lys Glu Met
      50      55      60
Glu Gly Ser Ser Gly Lys Gln Leu Ile Lys Glu Ile Cys Pro Thr Cys
65      70      75      80
Gly Asp His Asp Pro Lys Glu His Thr Trp Leu Met Phe Pro Gly Ser
      85      90      95
Asp Met Phe Ala Arg Val Pro Phe His Val Ala His Thr Val Val Glu
      100      105      110
Lys Asp Gln Glu Arg Leu Asp Leu Asp Thr Lys Lys Leu Gln Ser
      115      120      125

```

<210> 1405
 <211> 421
 <212> DNA
 <213> Homo sapiens

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<400> 1405
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120
gaagagtctg ccgccgagca aaacctgctg gccgccctgg gcgagttgca tatccaggtc
180
gtcaacgtca gcggtggcca gcagatcctc gaactcagcg gcccgaaact gcgcgacgtg
240
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300
ggcacggtgt tcgccaagtc gcaactggtg atccgccata ccgccgaaga cacctgggaa
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420
t
421

```

<210> 1406
 <211> 140
 <212> PRT
 <213> Homo sapiens

```

<400> 1406
Xaa Arg Leu His Lys Ala Leu Gly Ile Glu Leu Pro Gly Ala Leu Gln
1      5      10      15
Val Ile Val Lys Gly Glu Thr Ser Leu Gln Trp Leu Gly Pro Asp Glu
      20      25      30
Trp Leu Leu Ile Val Pro Ser Gly Glu Glu Phe Ala Ala Glu Gln Asn
      35      40      45
Leu Arg Ala Ala Leu Gly Glu Leu His Ile Gln Val Val Asn Val Ser
      50      55      60
Gly Gly Gln Gln Ile Leu Glu Leu Ser Gly Pro Asn Val Arg Asp Val
65      70      75      80
Leu Met Lys Ser Thr Ser Tyr Asp Val His Pro Asn Asn Phe Pro Val

```

```
<210> 1408
<211> 335
<212> PRT
<213> Homo sapiens
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<400> 1408

Xaa Gly Arg Glu Lys Leu Glu Leu Val Leu Ser Asn Leu Gln Ala Asp
 1 5 10 15
 Val Leu Glu Leu Leu Glu Phe Val Tyr Thr Gly Ser Leu Val Ile
 20 25 30
 Asp Ser Ala Asn Ala Lys Thr Leu Glu Ala Ala Ser Lys Phe Gln
 35 40 45
 Phe His Thr Phe Cys Lys Val Cys Val Ser Phe Leu Glu Lys Gln Leu
 50 55 60
 Thr Ala Ser Asn Cys Leu Gly Val Ala Ala Met Ala Glu Ala Met Gln
 65 70 75 80
 Cys Ser Glu Leu Tyr His Xaa Ala Lys Ala Phe Ala Leu Gln Ile Phe
 85 90 95
 Pro Glu Val Ala Ala Gln Glu Glu Ile Leu Ser Ile Ser Lys Asp Asp
 100 105 110
 Phe Ile Ala Tyr Val Ser Asn Asp Ser Leu Asn Thr Lys Ala Glu Glu
 115 120 125
 Leu Val Tyr Glu Thr Val Ile Lys Trp Ile Lys Lys Asp Pro Ala Thr
 130 135 140
 Arg Thr Gln Tyr Ala Ala Glu Leu Leu Ala Val Val Arg Leu Pro Phe
 145 150 155 160
 Ile His Pro Ser Tyr Leu Leu Asn Val Val Asp Asn Glu Glu Leu Ile
 165 170 175
 Lys Ser Ser Glu Ala Cys Arg Asp Leu Val Asn Glu Ala Lys Arg Tyr
 180 185 190
 His Met Leu Pro His Ala Arg Gln Glu Met Gln Thr Pro Arg Thr Arg
 195 200 205
 Pro Arg Leu Ser Ala Gly Val Ala Glu Val Ile Val Leu Val Gly Gly
 210 215 220
 Arg Gln Met Val Gly Met Thr Gln Arg Ser Leu Val Ala Val Thr Cys
 225 230 235 240
 Trp Asn Pro Gln Asn Lys Trp Tyr Pro Leu Ala Ser Val Pro Phe
 245 250 255
 Leu Gly Pro Gly Phe Phe Ser Val Val Ser Ala Gly Ala Asn Ile Tyr
 260 265 270
 Leu Ser Gly Gly Met Glu Ser Gly Val Pro Leu Ala Asp Val Trp Cys
 275 280 285
 Tyr Met Ser Leu Leu Asp Asn Trp Asn Leu Val Ser Arg Met Pro Val
 290 295 300
 Pro Arg Cys Arg Pro His Ser Leu Val Tyr Asp Gly Lys Ile Tyr Thr
 305 310 315 320
 Leu Gly Gly Leu Gly Val Ala Gly Asn Val Asp His Val Glu Arg
 325 330 335

<210> 1409

<211> 279

<212> DNA

<213> Homo sapiens

<400> 1409

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 120

cacgaccaac aggccgcaat cgtcgagcgc gcgctggagg ccggcggttac gcaaagtctg
 180
 ctgacaggca ccagcctggc ggtcagcgaa caagccctgg aactgtgcca tcaactggat
 240
 gcaagcggcg cccacctggt cgccacggcc ggcgtgcac
 279

<210> 1410
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1410
 Xaa Met Lys Phe Leu Val Phe Ser Glu Lys Arg Ala Phe Cys Tyr Ala
 1 5 10 15
 Gly Arg Pro Ala Ala Arg Asp Ser Thr Met Gln Leu Ile Asp Ile Gly
 20 25 30
 Val Asn Leu Thr Asn Ser Ser Phe His Asp Gln Gln Ala Ala Ile Val
 35 40 45
 Glu Arg Ala Leu Glu Ala Gly Val Thr Gln Met Leu Leu Thr Gly Thr
 50 55 60
 Ser Leu Ala Val Ser Glu Gln Ala Leu Glu Leu Cys His Gln Leu Asp
 65 70 75 80
 Ala Ser Gly Ala His Leu Phe Ala Thr Ala Gly Val His
 85 90

<210> 1411
 <211> 321
 <212> DNA
 <213> Homo sapiens

<400> 1411
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 120
 gattttcaat ctattttctta ctattccgcg ccaaaaagca tgaaggataa gcctaagtcg
 180
 ttagacgaag tcgatcctga attgttacgt acttatgaaa aactgggcat tcctctcata
 240
 gaacagcaaa tgcttgctgg tatcgccgta gatgctgtct ttgactcagt gtctgtcggt
 300
 actacttttc gtcaaaaagct t
 321

<210> 1412
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 1412
 Xaa Arg Ile Ser Gly Met Lys Asn Glu Pro Glu Trp Met Leu Glu Trp
 1 5 10 15
 Arg Leu Ser Ala Phe Arg Glu Trp Leu Glu Met Glu Glu Pro Ser Trp

```

      20      25      30
Ala His Val Asp Tyr Pro Lys Ile Asp Phe Gln Ser Ile Ser Tyr Tyr
      35      40      45
Ser Ala Pro Lys Ser Met Lys Asp Lys Pro Lys Ser Leu Asp Glu Val
      50      55      60
Asp Pro Glu Leu Leu Arg Thr Tyr Glu Lys Leu Gly Ile Pro Leu Ile
      65      70      75      80
Glu Gln Gln Met Leu Ala Gly Ile Ala Val Asp Ala Val Phe Asp Ser
      85      90      95
Val Ser Val Val Thr Thr Phe Arg Gln Lys Leu
      100      105

```

<210> 1413
 <211> 385
 <212> DNA
 <213> Homo sapiens

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<400> 1413
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ggcgaaatcg gcctcgacct gatcatcgac ctgccacgtc cgcgtgcccc tggttcacac
120
cgcttgcccg cgttggaagc cgaagtgata aaccgtgtgc tgcataacc cngcacgaag
180
ccggaacccg aacatgttaa accgctgcct acgaaattgc gttgggctca ataactcata
240
gaggaacacc atcatgacta taaaagccat caacgtgcgt aaccagttaa aaggcaccat
300
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360
cgtcacttct gtgatcacta cgcgt
385

```

<210> 1414
 <211> 55
 <212> PRT
 <213> Homo sapiens

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<400> 1414
Met Thr His Asp Val Ser Glu Ala Val Ala Ile Ala Asp Arg Val Ile
1      5      10      15
Leu Ile Glu Asp Gly Glu Ile Gly Leu Asp Leu Ile Ile Asp Leu Pro
      20      25      30
Arg Pro Arg Ala Arg Gly Ser His Arg Leu Ala Ala Leu Glu Ala Glu
      35      40      45
Val Ile Asn Arg Val Leu Ser
      50      55

```

<210> 1415
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1415

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 120
 tctgaggctg aagaggagga gaaagcccct gtgttgccag agagtacaga agggcgggag
 180
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 240
 aagctgccag tcttcaagtc cctccggcac atgaggcagg tcctgggtgc cccttcttcc
 300
 cgcattgctgg cctggcacgt tctcatgggg aaccagggtga tctggaaaag cagagacgtg
 360
 gacctcgtcc agtcagcttt tgaagtactt cgggtgagaa catcttttcc ttaggtgtgc
 420

<210> 1416

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1416

Met	Arg	Leu	Phe	Val	Pro	Val	Thr	Val	Leu	Val	Ile	Cys	Leu	Ala	Asp
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Leu	Glu	Glu	Glu	Ser	Glu	Ser	Trp	Asp	Asn	Ser	Glu	Ala	Glu	Glu	Glu
			20					25					30		
Glu	Lys	Ala	Pro	Val	Leu	Pro	Glu	Ser	Thr	Glu	Gly	Arg	Glu	Leu	Thr
		35					40					45			
Gln	Gly	Pro	Ala	Glu	Ser	Ser	Ser	Leu	Ser	Gly	Cys	Gly	Ser	Trp	Gln
	50					55					60				
Pro	Arg	Lys	Leu	Pro	Val	Phe	Lys	Ser	Leu	Arg	His	Met	Arg	Gln	Val
65					70					75				80	
Leu	Gly	Ala	Pro	Ser	Phe	Arg	Met	Leu	Ala	Trp	His	Val	Leu	Met	Gly
			85						90					95	
Asn	Gln	Val	Ile	Trp	Lys	Ser	Arg	Asp	Val	Asp	Leu	Val	Gln	Ser	Ala
		100						105					110		
Phe	Glu	Val	Leu	Arg	Val	Arg	Thr	Ser	Phe	Pro					
		115					120								

<210> 1417

<211> 5058

<212> DNA

<213> Homo sapiens

<400> 1417

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 120
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 180
 atccctcccg ccactcagct caggctgatg agaagcagag caacgggtgt atcgggtgtt
 240
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 300

cccgccctct tttgtcctct tcccagggttc cctggccctc tcggagaaac gcacttggtt
360
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420
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480
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540
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660
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720
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900
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1080
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1140
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<210> 1418

<211> 1532
 <212> PRT
 <213> Homo sapiens

<400> 1418

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Leu	Cys	Leu	Cys	Leu	Leu	Pro	His	Val	Val	Pro	Gly	Thr	Thr	Glu	Asp
			20					25					30		
Thr	Leu	Ile	Thr	Gly	Ser	Lys	Thr	Pro	Ala	Pro	Val	Thr	Ser	Thr	Gly
		35					40					45			
Ser	Thr	Thr	Ala	Thr	Leu	Glu	Gly	Gln	Ser	Thr	Ala	Ala	Ser	Ser	Arg
		50				55					60				
Thr	Ser	Asn	Gln	Asp	Ile	Ser	Ala	Ser	Ser	Gln	Asn	His	Gln	Thr	Lys
65					70					75				80	
Ser	Thr	Glu	Thr	Thr	Ser	Lys	Ala	Gln	Thr	Asp	Thr	Leu	Thr	Gln	Met
				85					90					95	
Met	Thr	Ser	Thr	Leu	Phe	Ser	Ser	Pro	Ser	Val	His	Asn	Val	Met	Glu
			100					105					110		
Thr	Val	Thr	Gln	Glu	Thr	Ala	Pro	Pro	Asp	Glu	Met	Thr	Thr	Ser	Phe
		115					120					125			
Pro	Ser	Ser	Val	Thr	Asn	Thr	Leu	Met	Met	Thr	Ser	Lys	Thr	Ile	Thr
						135						140			
Met	Thr	Thr	Ser	Thr	Asp	Ser	Thr	Leu	Gly	Asn	Thr	Glu	Glu	Thr	Ser
145					150					155					160
Thr	Ala	Gly	Thr	Glu	Ser	Ser	Thr	Pro	Val	Thr	Ser	Ala	Val	Ser	Ile
				165					170					175	
Thr	Ala	Gly	Gln	Glu	Gly	Gln	Ser	Arg	Lys	Thr	Ser	Trp	Arg	Thr	Ser
			180					185					190		
Ile	Gln	Asp	Thr	Ser	Ala	Ser	Ser	Gln	Asn	His	Trp	Thr	Arg	Ser	Thr
		195					200					205			
Gln	Thr	Thr	Arg	Glu	Ser	Gln	Thr	Ser	Thr	Leu	Thr	His	Arg	Thr	Thr
		210				215						220			
Ser	Thr	Pro	Ser	Phe	Ser	Pro	Ser	Val	His	Asn	Val	Thr	Gly	Thr	Val
225					230					235					240
Ser	Gln	Lys	Thr	Ser	Pro	Ser	Gly	Glu	Thr	Ala	Thr	Ser	Ser	Leu	Cys
				245					250					255	
Ser	Val	Thr	Asn	Thr	Ser	Met	Met	Thr	Ser	Glu	Lys	Ile	Thr	Val	Thr
			260					265					270		
Thr	Ser	Thr	Gly	Ser	Thr	Leu	Gly	Asn	Pro	Gly	Glu	Thr	Ser	Ser	Val
		275					280					285			
Pro	Val	Thr	Gly	Ser	Leu	Met	Pro	Val	Thr	Ser	Ala	Ala	Leu	Val	Thr
		290				295					300				
Val	Asp	Pro	Glu	Gly	Gln	Ser	Pro	Ala	Thr	Phe	Ser	Arg	Thr	Ser	Thr
305					310					315					320
Gln	Asp	Thr	Thr	Ala	Phe	Ser	Lys	Asn	His	Gln	Thr	Gln	Ser	Val	Glu
				325					330					335	
Thr	Thr	Arg	Val	Ser	Gln	Ile	Asn	Thr	Leu	Asn	Thr	Leu	Thr	Pro	Val
			340					345					350		
Thr	Thr	Ser	Thr	Val	Leu	Ser	Ser	Pro	Ser	Gly	Phe	Asn	Pro	Ser	Gly
		355					360					365			
Thr	Val	Ser	Gln	Glu	Thr	Phe	Pro	Ser	Gly	Glu	Thr	Thr	Ile	Ser	Ser
		370				375					380				
Pro	Ser	Ser	Val	Ser	Asn	Thr	Phe	Leu	Val	Thr	Ser	Lys	Val	Phe	Arg

385 390 395 400
 Met Pro Ile Ser Arg Asp Ser Thr Leu Gly Asn Thr Glu Glu Thr Ser
 405 410 415
 Leu Ser Val Ser Gly Thr Ile Ser Ala Ile Thr Ser Lys Val Ser Thr
 420 425 430
 Ile Trp Trp Ser Asp Thr Leu Ser Thr Ala Leu Ser Pro Ser Ser Leu
 435 440 445
 Pro Pro Lys Ile Ser Thr Ala Phe His Thr Gln Gln Ser Glu Gly Ala
 450 455 460
 Glu Thr Thr Gly Arg Pro His Glu Arg Ser Ser Phe Ser Pro Gly Val
 465 470 475 480
 Ser Gln Glu Ile Phe Thr Leu His Glu Thr Thr Thr Trp Pro Ser Ser
 485 490 495
 Phe Ser Ser Lys Gly His Thr Thr Trp Ser Gln Thr Glu Leu Pro Ser
 500 505 510
 Thr Ser Thr Gly Ala Ala Thr Arg Leu Val Thr Gly Asn Pro Ser Thr
 515 520 525
 Gly Ala Ala Gly Thr Ile Pro Arg Val Pro Ser Lys Val Ser Ala Ile
 530 535 540
 Gly Glu Pro Gly Glu Pro Thr Thr Tyr Ser Ser His Ser Thr Thr Leu
 545 550 555 560
 Pro Lys Thr Thr Gly Ala Gly Ala Gln Thr Gln Trp Thr Gln Glu Thr
 565 570 575
 Gly Thr Thr Gly Glu Ala Leu Leu Ser Ser Pro Ser Tyr Ser Val Thr
 580 585 590
 Gln Met Ile Lys Thr Ala Thr Ser Pro Ser Ser Ser Pro Met Leu Asp
 595 600 605
 Arg His Thr Ser Gln Gln Ile Thr Thr Ala Pro Ser Thr Asn His Ser
 610 615 620
 Thr Ile His Ser Thr Ser Thr Ser Pro Gln Glu Ser Pro Ala Val Ser
 625 630 635 640
 Gln Arg Gly His Thr Gln Ala Pro Gln Thr Thr Gln Glu Ser Gln Thr
 645 650 655
 Thr Arg Ser Val Ser Pro Met Thr Asp Thr Lys Thr Val Thr Thr Pro
 660 665 670
 Gly Ser Ser Phe Thr Ala Ser Gly His Ser Pro Ser Glu Ile Val Pro
 675 680 685
 Gln Asp Ala Pro Thr Ile Ser Ala Ala Thr Thr Phe Ala Pro Ala Pro
 690 695 700
 Thr Gly Asp Gly His Thr Thr Gln Ala Pro Thr Thr Ala Leu Gln Ala
 705 710 715 720
 Thr Pro Ser Ser His Asp Ala Thr Leu Gly Pro Ser Gly Gly Thr Ser
 725 730 735
 Leu Ser Lys Thr Gly Ala Leu Thr Leu Ala Asn Ser Val Val Ser Thr
 740 745 750
 Pro Gly Gly Pro Glu Gly Gln Trp Thr Ser Ala Ser Ala Ser Thr Ser
 755 760 765
 Pro Asp Thr Ala Ala Ala Met Thr His Thr His Gln Ala Glu Ser Thr
 770 775 780
 Glu Ala Ser Gly Gln Thr Gln Thr Ser Glu Pro Ala Ser Ser Gly Ser
 785 790 795 800
 Arg Thr Thr Ser Ala Gly Thr Ala Thr Pro Ser Ser Ser Gly Ala Ser
 805 810 815
 Gly Thr Thr Pro Ser Gly Ser Glu Gly Ile Ser Thr Ser Gly Glu Thr

			820					825					830			
Thr	Arg	Phe	Ser	Ser	Asn	Pro	Ser	Arg	Asp	Ser	His	Thr	Thr	Gln	Ser	
		835						840					845			
Thr	Thr	Glu	Leu	Leu	Ser	Ala	Ser	Ala	Ser	His	Gly	Ala	Ile	Pro	Val	
		850				855					860					
Ser	Thr	Gly	Met	Ala	Ser	Ser	Ile	Val	Pro	Gly	Thr	Phe	His	Pro	Thr	
865					870					875					880	
Leu	Ser	Glu	Ala	Ser	Thr	Ala	Gly	Arg	Pro	Thr	Gly	Gln	Ser	Ser	Pro	
				885				890						895		
Thr	Ser	Pro	Ser	Ala	Ser	Pro	Gln	Glu	Thr	Ala	Ala	Ile	Ser	Arg	Met	
				900				905						910		
Ala	Gln	Thr	Gln	Arg	Thr	Arg	Thr	Ser	Arg	Gly	Ser	Asp	Thr	Ile	Ser	
		915					920					925				
Leu	Ala	Ser	Gln	Ala	Thr	Asp	Thr	Phe	Ser	Thr	Val	Pro	Pro	Thr	Pro	
		930				935					940					
Pro	Ser	Ile	Thr	Ser	Ser	Gly	Leu	Thr	Ser	Pro	Gln	Thr	Gln	Thr	His	
945					950					955					960	
Thr	Leu	Ser	Pro	Ser	Gly	Ser	Gly	Lys	Thr	Phe	Thr	Thr	Ala	Leu	Ile	
				965					970					975		
Ser	Asn	Ala	Thr	Pro	Leu	Pro	Val	Thr	Tyr	Ala	Ser	Ser	Ala	Ser	Thr	
			980					985					990			
Gly	His	Thr	Thr	Pro	Leu	His	Val	Thr	Asp	Ala	Ser	Ser	Val	Ser	Thr	
		995					1000						1005			
Gly	His	Ala	Thr	Pro	Leu	Pro	Val	Thr	Ser	Pro	Ser	Ser	Val	Ser	Thr	
		1010				1015					1020					
Gly	Asp	Thr	Thr	Pro	Leu	Pro	Val	Thr	Ser	Pro	Ser	Ser	Ala	Ser	Ser	
1025					1030					1035					1040	
Gly	His	Ala	Thr	Ser	Leu	Pro	Val	Thr	Asp	Ala	Ser	Ser	Leu	Ser	Thr	
				1045					1050					1055		
Gly	His	Ala	Thr	Ser	Leu	His	Val	Thr	Asp	Ala	Ser	Ser	Val	Ser	Thr	
				1060				1065					1070			
Gly	His	Ala	Thr	Leu	Leu	His	Val	Thr	Asp	Ala	Ser	Ser	Ala	Ser	Thr	
				1075			1080					1085				
Gly	His	Thr	Thr	Ser	Leu	Pro	Val	Thr	Asp	Ala	Ser	Ser	Val	Ser	Thr	
		1090				1095					1100					
Gly	Asp	Thr	Thr	Pro	Leu	Pro	Val	Thr	Asp	Thr	Ser	Ser	Ala	Ser	Thr	
1105					1110					1115					1120	
Gly	Asp	Thr	Thr	Pro	Leu	His	Val	Thr	Asp	Ala	Ser	Ser	Val	Ser	Thr	
				1125					1130					1135		
Gly	His	Ala	Thr	Pro	Leu	His	Val	Thr	Ser	Leu	Ser	Ser	Val	Ser	Thr	
				1140				1145					1150			
Gly	Asp	Thr	Thr	Pro	Leu	Pro	Val	Thr	Ser	Pro	Ser	Ser	Ala	Ser	Ser	
		1155					1160					1165				
Gly	His	Ala	Thr	Ser	Leu	Pro	Val	Thr	Asp	Ala	Ser	Ser	Val	Ser	Thr	
		1170				1										

1250 1255 1260
 Gly His Ala Thr Pro Leu His Val Thr Asp Ala Ser Ser Val Ser Thr
 1265 1270 1275 1280
 Gly Asp Thr Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr
 1285 1290 1295
 Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr
 1300 1305 1310
 Gly Asp Thr Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Val Ser Thr
 1315 1320 1325
 Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr
 1330 1335 1340
 Ser His Ala Thr Ser Leu Pro Val Thr Asp Pro Ser Ser Ala Ser Thr
 1345 1350 1355 1360
 Gly Asp Thr Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Val Ser Thr
 1365 1370 1375
 Gly His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
 1380 1385 1390
 Gly Asp Thr Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
 1395 1400 1405
 Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
 1410 1415 1420
 Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr
 1425 1430 1435 1440
 Gly His Thr Thr Pro Leu His Val Thr Ser Pro Ser Ser Ala Ser Thr
 1445 1450 1455
 Gly His Ala Thr Pro Leu Pro Val Thr Ser Pro Ser Ser Ala Ser Thr
 1460 1465 1470
 Ser His Ala Thr Ser Leu Pro Val Thr Asp Thr Ser Ser Ala Ser Thr
 1475 1480 1485
 Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr
 1490 1495 1500
 Gly His Ala Thr Pro Leu Leu Val Thr Asp Thr Ser Ser Ala Ser Thr
 1505 1510 1515 1520
 Gly His Ala Thr Pro Leu Pro Val Thr Asp Thr Ser
 1525 1530

<210> 1419
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 1419
 aaggctatgg gaattcaaaa gtatgtgttc tattccatcc acaactgtga caagcagcct
 60
 gaggttcctt tgatggaaat caagtattgt actggtaaatt ttattcagga cagtggctctg
 120
 gattatatca tcatccgttt gtgtgggtttc atgcaggggtc ttattgggca atatgctgtt
 180
 cctatactag aagagaagtc cgtctgggga actgatgctc caactcggat tgcttacatg
 240
 gatacccagg acgtagctcg actaacgttt atagctatgc ggaatgagaa ggccaacaag
 300
 aaactcatg
 309

<210> 1420
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1420
 Lys Ala Met Gly Ile Gln Lys Tyr Val Phe Tyr Ser Ile His Asn Cys
 1 5 10 15
 Asp Lys Gln Pro Glu Val Pro Leu Met Glu Ile Lys Tyr Cys Thr Gly
 20 25 30
 Lys Phe Ile Gln Asp Ser Gly Leu Asp Tyr Ile Ile Ile Arg Leu Cys
 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
 65 70 75 80
 Asp Thr Gln Asp Val Ala Arg Leu Thr Phe Ile Ala Met Arg Asn Glu
 85 90 95
 Lys Ala Asn Lys Lys Leu Met
 100

<210> 1421
 <211> 385
 <212> DNA
 <213> Homo sapiens

<400> 1421
 ccatggcggc atgggtggag agagaagctg gggagaagaa atgatgcaga gatctcgcca
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 ggccagggag ctgggctggg cagccaggag tagagaaaca acgctcccag aggaggggag
 120
 gatgttagag caaagccgag cccagctgct ggcgaatgca tctgtgatgc ccatgagcag
 180
 ccaggatttc agctccgctc tacttcttga ctgctgcaga actcagcacc agctccagtg
 240
 ccctcagagc cctgattttt cacaaaccga ctccctcaag cctcccctgt gggcgggata
 300
 cacaagccag agtcgccttg tcacatctct tctctctcca ccaggtcatg ggcaaacctt
 360
 cctgacatac ttacgacat tacag
 385

<210> 1422
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1422
 Met Gly Gly Glu Arg Ser Trp Gly Glu Glu Met Met Gln Arg Ser Arg
 1 5 10 15
 Gln Ala Arg Glu Leu Gly Trp Ala Ala Arg Ser Arg Glu Thr Thr Leu
 20 25 30
 Pro Glu Glu Gly Arg Met Leu Glu Gln Ser Arg Ala Gln Leu Leu Ala

```

      35              40              45
Asn Ala Ser Val Met Pro Met Ser Ser Gln Asp Phe Ser Ser Ala Leu
  50              55              60
Leu Leu Asp Cys Cys Arg Thr Gln His Gln Leu Gln Cys Pro Gln Ser
  65              70              75              80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
      85              90              95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
      100              105              110
His Gly Gln Thr Phe Leu Thr Tyr Phe Thr Thr Leu Gln
      115              120              125

```

<210> 1423
 <211> 336
 <212> DNA
 <213> Homo sapiens

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<400> 1423
nntattcttc aatccttcca caatgtgcaa caaatggcga ttgactggct cactcgaaat
  60
ctctatcttg tggaccatgt cggtgaccgg atctttgttt gtaattccaa cggttctgta
  120
tgtgtcaccc tgattgatct ggagcttcac aatcctaaag caatagcagt agatccaata
  180
gcaggaaaac ttttctttac tgactacggg aatgtcgcca aagtggagag atgtgacatg
  240
gatgggatga accgaacaag gataattgat tcaaagacag agcagccagc tgcactggca
  300
ctagacctag tcaacaaatt ggtttactgg gtagat
  336

```

<210> 1424
 <211> 112
 <212> PRT
 <213> Homo sapiens

```

<400> 1424
Xaa Ile Leu Gln Ser Phe His Asn Val Gln Gln Met Ala Ile Asp Trp
  1              5              10              15
Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val Gly Asp Arg Ile Phe
      20              25              30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
      35              40              45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
      50              55              60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
      65              70              75              80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
      85              90              95
Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
      100              105              110

```

<210> 1425
 <211> 672

<212> DNA

<213> Homo sapiens

<400> 1425

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accggtgttt tcgatcacct gggcgggttg agtgactatc gcagtcagat cggccccgatg
60
gcccggcatg tcgaagacct ggccttggcg ctacaggtca ttgccgggtga agatggggtc
120
gatgccgggg tgattccgat gccgctgcgc cgtatgcaaa ctcaaacgct gaagggggtg
180
cgagtcgcct ggtacagcga tgggtggcatt gagcccgttg acgcgctcac gcacaccaca
240
ttgcaggcgg tcgccgatct attggacgct gaaggcgctt tgatccgccc ggccttcccc
300
tcggcggttg gcaatgcccc tgacattacc gaacgctatt gggcaatgag tcaaagctcc
360
ggcgcgcagt cgatccagct gttttcagat tgggatcagt tccgtacagc catgctgggg
420
ttcatggccg actacgacat taccctgtgc cctgtcgatg ccgcgcgggc gacccaactg
480
ggagagacgc ggccagggtt gttcagttcc ccccttccta atggcttggc gggttggcct
540
tgtgtggttg tccggggccg aacggatagc gcgggtttgc cggttggcgt gcagattgtc
600
gcgcgacctt ggcacgagcc tgtcgcgttg gcggcagcag cggccattga gcgcgcgctg
660
ccgttcacgc gt
672

```

<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

```

Thr Gly Val Phe Asp His Leu Gly Gly Leu Ser Asp Tyr Arg Ser Gln
1      5      10      15
Ile Gly Pro Met Ala Arg His Val Glu Asp Leu Ala Leu Ala Gln
20     25     30
Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
35     40     45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
50     55     60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
65     70     75     80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
85     90     95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
100    105    110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
115    120    125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
130    135    140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

```

145          150          155          160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
          165          170          175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
          180          185          190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
          195          200          205
Ala Leu Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
          210          215          220

```

<210> 1427
 <211> 270
 <212> DNA
 <213> Homo sapiens

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<400> 1427
atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcagtc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgttccgctc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttggctagc
270

```

<210> 1428
 <211> 90
 <212> PRT
 <213> Homo sapiens

```

<400> 1428
Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
85          90

```

<210> 1429
 <211> 384
 <212> DNA
 <213> Homo sapiens

```

<400> 1429
ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

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catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcggtgatcg ccggcgcggt ggtcaccaac atttactgca cccagccggt gctgccgttg
 180
 atgcctcgg acatgggcgt cgcagtgtcg acgggtcaacc tgggtggcagg cgcggccttg
 240
 ctgggggttg ccaccgggtt ggcgttttta ttgcccatgg gcgaccgctt tgaccggcgc
 300
 aagctgggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcgttgat cggc
 384

<210> 1430
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1430
 Met Thr Ser Glu Asn Ala Pro Pro Arg Gly Lys Ile Ile Met Met Ala
 1 5 10 15
 Val Ile Ala Gly Ala Val Val Thr Asn Ile Tyr Cys Thr Gln Pro Val
 20 25 30
 Leu Pro Leu Ile Ala Ser Asp Met Gly Val Ala Val Ser Thr Val Asn
 35 40 45
 Leu Val Ala Gly Ala Ala Leu Leu Gly Phe Ala Thr Gly Leu Ala Phe
 50 55 60
 Leu Leu Pro Met Gly Asp Arg Phe Asp Arg Arg Lys Leu Val Leu Gly
 65 70 75 80
 Gln Ile Ala Leu Ala Phe Cys Phe Ala Leu Ala Ala Ala Phe Ala Pro
 85 90 95
 Arg Ile Trp Ala Leu Ile Gly
 100

<210> 1431
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 1431
 aagcttcagg gcagggtgtcc cctgaagtca agcctgattc tgcattcatct tgtatagcac
 60
 aaactggcga cacctgtgac tttgcctttc ccagggtccc tgctctccgc tccaggtagg
 120
 ctcagcctga gggagggtgt ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttgga gagctgtggg ctgcatcccc ctggctcctc gtcccacagg
 240
 cagccccgct gtgtgtctgg tcttgacagg tggtgcagc ttctgggccc tgcttcacg
 300
 cctcttccc atgacacctc agccttgga ggtgtaatag tttcccatgt tgctgatctt
 360
 tagtttgct cctctcctt ggtgttctt tctgctgttc catcctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
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 60
 gacgcggccg tcagcaatgc tgtggccttg aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcgat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80
Leu	Val	Asn	Glu	Ala	Ser	Gln
				Ala	Glu	Ser
					His	Val
						Arg
						Ala
		85		90		95
Met	Gln					

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

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ntttctggct tatgtggttt ccccggtgtgt gaggtgggat ccactccccg catagtctct
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cgtggcgatg ggacacctgg aaagtgctgt gatgtctttg aatgtgttaa tgatacaaag
120
ccagcctgcg tatttaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcc aagggggcggt gccatctgct tcaactgcca gtgtggtgag
240
ataaactgcg agaggtacta cgtgccccgaa ggagagtgtt gcccagtgtg tgaaatccag
300
tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
360
cgggtggcggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
420
gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgcctgggga gtgttgcctt
480
gtgtgccaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgcactctga cagggaagga ctgcattaat ggtttcaaac gcgatcacia tgggtgtcgg
600
acctgtcagt gcataaacac cgaggaacta tgttcagaac gtaaacaagg ctgcacctg
660
aactgtccct tcgggtttct tactgatgcc caaaactgtg agatctgtga gtgccgcca
720
aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
780
aataagcacg gctgtgacat ctgtcgtgt aagaaatgtc cagagctctc atgcagtaag
840
natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
900
ggcctctgct tcagctgggc caccatcct gtcgggcact tgtctcaccg tggatggtca
960
tcatacataa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgccctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactccnct ccatcttcca cgccctgga ggagaatact ttgtggaagg agaaacgtgg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

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gtgtgcccac cgctgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgcaata acagcgtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtacc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgccc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgtccct actgcataga agacacaatt
 1560
 ccaaagaagg tgggtgtgcc aattcagtggg aaggcctatg ccgacgagga gcggtggggac
 1620
 cttgacagct gcacccactg ctactgcctg cagggccaga ccttctgctc gaccgtcagc
 1680
 tgccccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa Ser Gly Leu Cys Gly Phe Pro Val Cys Glu Val Gly Ser Thr Pro
 1 5 10 15
 Arg Ile Val Ser Arg Gly Asp Gly Thr Pro Gly Lys Cys Cys Asp Val
 20 25 30
 Phe Glu Cys Val Asn Asp Thr Lys Pro Ala Cys Val Phe Asn Asn Val
 35 40 45
 Glu Tyr Tyr Asp Gly Asp Met Phe Arg Met Asp Asn Cys Arg Phe Cys
 50 55 60
 Arg Cys Gln Gly Gly Val Ala Ile Cys Phe Thr Ala Gln Cys Gly Glu
 65 70 75 80
 Ile Asn Cys Glu Arg Tyr Tyr Val Pro Glu Gly Glu Cys Cys Pro Val
 85 90 95
 Cys Glu Ile Gln Cys Ile Leu Leu Ile Ile Pro Leu Ala Ala Asn
 100 105 110
 Gly Leu Ile Leu Ala His Gly Asp Arg Trp Arg Glu Asp Asp Cys Thr
 115 120 125
 Phe Cys Gln Cys Val Asn Gly Glu Arg His Cys Val Ala Thr Val Cys
 130 135 140
 Gly Gln Thr Cys Thr Asn Pro Val Lys Val Pro Gly Glu Cys Cys Pro
 145 150 155 160
 Val Cys Glu Glu Pro Thr Ile Ile Thr Val Asp Pro Pro Ala Cys Gly
 165 170 175
 Glu Leu Ser Asn Cys Thr Leu Thr Gly Lys Asp Cys Ile Asn Gly Phe
 180 185 190
 Lys Arg Asp His Asn Gly Cys Arg Thr Cys Gln Cys Ile Asn Thr Glu
 195 200 205
 Glu Leu Cys Ser Glu Arg Lys Gln Gly Cys Thr Leu Asn Cys Pro Phe
 210 215 220
 Gly Phe Leu Thr Asp Ala Gln Asn Cys Glu Ile Cys Glu Cys Arg Pro


```

225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

<210> 1437

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1437

```

cggggaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60
aggccatgac cggagccatc ccgagcagca ggtgcacggc ccgggccggt gactcgtgga
120
cccgtaccct catgacctcg atgcaacttc cacggtgggtc caccgatcac atcgaccgct
180
cggtccatgt cgatgctgag cagttcgacc ggttgcgag cgagttcctg tcccgtgggc
240
acagttctgg ccctgccgca catgggggtcc tgggacttgg ccggggcctg ggtggccaga
300
cgcggtttct ccccgagttc cgtcgcgagg aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1438

```

Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
 1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
          20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
          35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50          55          60

```

<210> 1439

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1439

accggtttgc tttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
60
tgcttctttc cacaatgtag acttaaaaaa atcgccgtaa acattttacc atatgattga
120
gtcaggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcatg ggtggggagt
180
cgcgaaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt
240
ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc
300
agtgggttaa caagacgacg gggaacttca gagtgcaggc agtcctcatc tttggcagat
360
tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
420
cggtttcaca gtcattttcc gacacgggca gaggggtgaa gatactgagt c
471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
		35					40					45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
		50				55					60				
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65					70				75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
				85				90						95	
Val	Lys	Ile	Leu	Ser											
				100											

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnngagtgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg
60
gcagtcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
120
accgcagctc aactcaccg cacggcagct cactctcacc gcacgggcagc tcacactcac
180
cacacgcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac
240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg cacggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacgggag ctactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgcc aactaatgg tcgccatcgg caatgcgagc
 60
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac ccgtcctgcg
 120
 gaagccgcta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccat gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1           5           10           15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20           25           30
Leu His Thr Met Thr Arg Pro Ala Glu Ala Ala Thr Thr Ser Trp Ala
      35           40           45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50           55           60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65           70           75           80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85           90           95

```

<210> 1445
 <211> 294
 <212> DNA
 <213> Homo sapiens

```

<400> 1445
naccggttca ccggggaggg cttcgatggg ggcaagggtca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcgttcgg gacttcgacg cattcatctc cggcaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt gggtcttttcg agccgggtca
180
gaggtttatg agctggcctt ccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
agggtggacc ccgacaacac cgtcgacaag ctgccaacac tcggcgagcg cctg
294

```

<210> 1446
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1446
Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
1           5           10           15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20           25           30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35           40           45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50           55           60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65           70           75           80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85           90           95
Arg Leu

```

<210> 1447
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1447

```

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatggtg
60
ggtaatatct ccattgcccc ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac
120
gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcggtgccgg caacgatatc
180
ctctacgggg ctggcggtgc cgaccaggtt tgggttggtt cgggcaacaa taccttcgtg
240
ttcggcccg tttccgactc ggcgccgaaa gcggccgacc ggatcatgga cttcaccagt
300
ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
360
gcg
363

```

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

```

Xaa Gln Asn Gln Lys Ile Asn Leu His Asp Gly Ser Phe Ser Asp Val
1      5      10      15
Gly Gly Met Val Gly Asn Ile Ser Ile Ala Gln Gly Val Thr Ile Glu
20      25      30
Asn Ala Val Gly Gly Ser Gly Asn Asp Leu Leu Ile Gly Asn Asp Ala
35      40      45
Ala Asn Glu Leu Arg Gly Gly Ala Gly Asn Asp Ile Leu Tyr Gly Ala
50      55      60
Gly Gly Ala Asp Gln Val Trp Val Gly Ser Gly Asn Asn Thr Phe Val
65      70      75      80
Phe Ala Ala Val Ser Asp Ser Ala Pro Lys Ala Ala Asp Arg Ile Met
85      90      95
Asp Phe Thr Ser Gly Gln Asp Lys Ile Asp Leu Ser Gly Ile Thr His
100     105     110
Gly Ser Gly Leu Thr Phe Val Asn Ala
115     120

```

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

```

aggcgctacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
60
cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg
120
ggaatgtacg tgtcaggagg agggaggggtg cctacaaccc tttggtactg gcgtttgtga
180
ttgaggcaac cgtcgtcatc gatggtgtca tccaacctgt ggtgtttaac gcacacctgg
240

```

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgcacg cttggggcggc gtttttctga acgcaatccc gccctggcac
 360
 cctttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtctttgcc
 420
 tttctccccg ggcgctgcg ccagaagctt gctgacgagc ttctgaggtt gacccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450
 <211> 138
 <212> PRT
 <213> Homo sapiens

<400> 1450
 Met Arg Leu Ser Leu His Glu Ser Leu Ser Gln Ser Arg Leu Ala Ile
 1 5 10 15
 Glu Arg Phe Ile Gln Ala Tyr Glu Pro Arg Leu Gly Asn Val Arg Val
 20 25 30
 Arg Arg Arg Glu Gly Ala Tyr Asn Pro Leu Val Leu Ala Phe Val Ile
 35 40 45
 Glu Ala Thr Val Val Ile Asp Gly Val Ile Gln Pro Val Val Phe Asn
 50 55 60
 Ala His Leu Val Gly Gly Gly Thr Gly Arg Val Cys Tyr Leu Met Phe
 65 70 75 80
 Phe Glu Leu Phe Tyr Gln Ser Glu Leu Ser Ala Leu Arg Thr Leu Gly
 85 90 95
 Arg Arg Phe Ser Glu Arg Asn Pro Ala Leu Ala Pro Phe Leu Ala Asp
 100 105 110
 Ser Arg Pro Gly Pro Gly Arg Arg Gly Ser Ile Glu Ser Leu Cys Leu
 115 120 125
 Ser Pro Arg Ala Pro Ala Pro Glu Ala Cys
 130 135

<210> 1451
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 1451
 aggcctctgg cgagttgatc tacagcttcg gaccgggtgc tatggctact ggcgtcaagt
 60
 acacgaacac agtttgact cctgtgggcg actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaaccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacgggtggc ttcaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1452
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
1 5 10 15
Asp Tyr Glu Val Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
20 25 30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
35 40 45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
50 55 60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65 70 75 80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
85 90 95

<210> 1453
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1453
cgggcgcgcg gcccacgtg caccgcgtgc atggtccttc gaggacgcgc atctgcagcc
60
cccgtctccc gcaaactcc aggcgggaga gctccggcca aggcgcgtgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactcgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcaccacac ggacac
326

<210> 1454
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1454
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
1 5 10 15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
20 25 30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
35 40 45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

50 55 60
 Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
 65 70 75 80
 Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
 85 90 95
 Thr Asp

<210> 1455
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1455
 gatccagtca aaaaagcatg tgggggttgct cacgctgggt ggaaagggtac tttgttgggt
 60
 gttgctatgg ctacagtga tgetatgata gcagaatatg gctgccgttt ggaaaaactt
 120
 tgggtggacct tggacccttc agtgggacct ggctgtttta ctctccagg ggaatcagca
 180
 gaggcatttc ataattctca tctgcatgt gtacaactat ttgattcacc aaatccctgt
 240
 atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
 300
 ccttccaaac tgac
 314

<210> 1456
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1456
 Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
 1 5 10 15
 Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
 20 25 30
 Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
 35 40 45
 Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
 50 55 60
 Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
 65 70 75 80
 Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
 85 90 95
 Cys Phe Leu Pro Pro Ser Lys Leu
 100

<210> 1457
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgcccaga acctttctctg cccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct ccccaggaaa
 180
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtgggggaca caggaagtcc acgcttgac ggaggggacg ggacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcactgggct gcctaccac tgcccaagtg cctcaagtca
 420
 acacattcct gcaactgn
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5					10					15	
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
			20					25					30		
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
		35					40					45			
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55					60				
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65					70				75					80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Tyr	Pro	Leu	Pro	Lys	
			85					90					95		
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
			100					105							

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagaggtca ccggccacga gattcccgcg gaggtcgcgc cccgccgcgc gggcgacccg
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc
 120
 acggatctgc gccgcatcgt cgaggacgcc tgggccttta cggctggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgtegagcat gccctccac tccccgatcg ccatgagctg gcgan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
 nnaagctttac gtgaaatgaa acgtcaatgg caacaggcga caatcgtgcc agagaaattg
 60
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
 120
 gaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcatt atcccgtgaa
 180
 gaagcacaaa ttcgcgggtga agcgcttaat ctaacgcctt atgatgcgat gcttgataag
 240
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaaggt aaagacgtgg
 300
 ttacctacgt taattgaaaa agcgttagaa aagcagcaat cagaatctat cattatgccca
 360
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

```

65          70          75          80
Phe Glu Pro Gly Thr Thr Thr Val Ser Leu Asn Thr Leu Phe Ser Lys
          85          90          95
Val Lys Thr Trp Leu Pro Thr Leu Ile Glu Lys Ala Leu Glu Lys Gln
          100          105          110
Gln Ser Glu Ser Ile Ile Met Pro Ser Gly Thr Phe Ser Thr Ala Asn
          115          120          125
Gln Lys Ala Leu Gly Leu Glu Ile Met Lys Leu Leu Lys Phe Asp Phe
          130          135          140

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<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

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nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gccaaaagtca tggggccgtgg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtac atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgtcg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

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<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

```

Xaa Ala Phe Gln Ser Lys Leu Asp Leu Thr Ala Phe Glu Phe Phe Ser
1          5          10          15
Asp Lys Ala Leu Ala Lys Val Met Gly Arg Gly Asp Val Pro Ala Pro
          20          25          30
Phe Glu Thr Glu Cys Pro Phe Tyr Ala Leu Leu Glu Phe Glu Ala Thr
          35          40          45
Thr Glu Glu Val Ala Asn His Ala Leu Glu Thr Phe Glu His Cys Val
          50          55          60
Glu Gln Gly Trp Val Leu Asp Gly Val Met Ser Gln Ser Glu Thr Gln
65          70          75          80
Leu His Asn Leu Trp Lys Leu Arg Glu Tyr Ile Ser Glu Thr Ile Ser
          85          90          95
His Trp Thr Pro Tyr Lys Asn Asp Ile Ser Val Thr Val Ser Lys Val
          100          105          110
Pro Ala Phe Leu Lys Glu Ile Asp Ala Ile Val Val Ser Ile Thr Arg

```

115 120 125
 Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala
 130 135 140

<210> 1465
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1465
 gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggt agatggcatg
 60
 cagcctctcg ggcgggaaag tgggtctacag tgccctgcttg cccgggcagg cagctcgtag
 120
 gcttatatgc ttagtggtta tggccctac cactgttttt gaccgcgcta ccattcgcca
 180
 caacctcacc gaattcaaac tccgggtggat ttcccacgcc gagcagtgga aggcggaaaa
 240
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg
 300
 gaccttggcc acggaagttt tcgggtcaagc acccgaattc gacttcccat atatgaaact
 360
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
 420
 cacg
 424

<210> 1466
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1466
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
 1 5 10 15
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
 20 25 30
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
 35 40 45
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
 50 55 60
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
 65 70 75 80
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
 85 90 95
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
 100 105 110
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
 115 120

<210> 1467
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1467

nacgcgtgac ggcgaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtacgtatg cgctgtgct gatggctcatg acaacgtgga atgccacgat cctaggcccg
 240
 gccaaactcgg tgcattgagaa ccgcataatac tgccctgcgc tcgtgtgtgg cgactcgtac
 300
 cctcttgtgc cgcttgagat ttggttccag acgcgcatca acttgccgtg cgtcgatgcc
 360
 cacacggggc gcgtcatgcc cgatcagttc tcgcccctct tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
			20					25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
		35					40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
	50					55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65				70						75				80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
			85						90					95	
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
		100						105						110	
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
		115						120							

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgt
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgtc attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttggtc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttgggtg cgtaatcgca
 360
 ggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcggtta caggaatcgt cgttctgttg attggtctac cattaatg
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa Leu Asp Leu Val Tyr Gly Leu Asn Asp Arg Pro Asn Pro Phe Ile
 1 5 10 15
 Ala Phe Leu Ala Leu Gln His Leu Leu Ala Ile Leu Val Pro Ile
 20 25 30
 Val Thr Xaa Gly Leu Leu Ile Cys Leu Ala Leu Gly Val Ser Arg Glu
 35 40 45
 Asp Thr Asn Met Ile Leu Ser Met Ser Leu Ile Ile Ser Gly Ile Ala
 50 55 60
 Thr Phe Leu Gln Cys Lys Lys Val Gly Pro Phe Gly Ala Gly Leu Leu
 65 70 75 80
 Ile Val Gln Gly Thr Ser Phe Asn Phe Ile Gly Pro Ile Ile Gly Ile
 85 90 95
 Gly Ser Ser Met Val Ala Ala Gly Thr Pro Val Glu Gln Val Met Ala
 100 105 110
 Ala Ile Phe Gly Val Val Ile Ala Gly Ser Phe Ile Glu Met Gly Val
 115 120 125
 Ser Gln Ile Leu Pro Trp Val Lys Lys Leu Ile Thr Pro Leu Val Thr
 130 135 140
 Gly Ile Val Val Leu Leu Ile Gly Leu Pro Leu Met
 145 150 155

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttgct gtggctcggc
 60
 gttatcgatc agccgctgac gattttgcac accaatctgg cgggtgtatat cggcattgtg
 120
 tacgcttata tgcggtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtgg aggcctcact ggatctcggt gcccgctccgc tgaaaacggt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattata gcgggggtcga tgctgggtgtt tatcccggcg
 300

gtcggtagt ttgttatccc ggaactgctc ggcggcggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tggtgttaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaatgcc agttccaatt tcacaagtgg tgcctcagc tttcttgga aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tcttcacca
300
gtccacctt tttataagca atttggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

```

      20      25      30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
      35      40      45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
      50      55      60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
65      70      75      80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
      85      90      95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
      100      105      110
Arg

```

<210> 1475

<211> 389

<212> DNA

<213> Homo sapiens

<400> 1475

```

accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
60
gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
120
ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtccaggtc attatcaaag accgcattga agtccgtttg cggcggggcga cccggcgcca
240
tttctccggc aggggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtatatt tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtggtgtc
389

```

<210> 1476

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1476

```

Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
1      5      10      15
Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
      20      25      30
Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
      35      40      45
Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
      50      55      60
Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
65      70      75      80
Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
      85      90      95
Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

```


100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120

<210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1477
 tacagcgaga atctgcacga taccacttc ctcaaacct attgcgttgg cttcgagcaa
 60
 ttctccctt atttgctggg ccaaacggac ggccaaccta aagatgcca atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcgccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg
 240
 tggatgacgg tagtgctggc ggcatgctt ggccaaatcg gcttaccggg cggcgggttc
 300
 ggttttggtt ggccctccaa cggcgcaggt acccccgagc cgcaaggggt gatcctgagc
 360
 ggtttctccg gttccccgc tacgccgga cgccatgcca agggggattt caaaggttac
 420
 agcagtacca ttccgatcgc gcgctttatc gatgccatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

```
<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens
```

```
<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens
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```
<210> 1481
<211> 545
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<212> DNA

<213> Homo sapiens

<400> 1481

```

gtcgggtcgc cgcccagtct cgtgccgaca tgcagttcct ggcccgggag gtcgcatcca
60
tccggatgca gatgggcgag ttggccacgc gcgattattt gcgctcggag ctacgcgacg
120
agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgaccgggt
180
tcgcgacgag cgagttgtcg catcggggcca acggtgtgta gacaagtcag catgagcacc
240
gagaacccag tggttaaggc cattgccgat gcgttgtcgc acgtcaatga ccccgagatc
300
aaacgccccca ttaccgatct caacatgatt gatgagatta ccgtcgacga gcaaggacgc
360
gctttcgtcc gcatactgct gaccgtcgcc ggggtgtcccc tcaagaccga gctgcgtgag
420
caggccaccg aggctgtgcg cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
480
accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
540
cgcgt
545

```

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

```

Met Ser Thr Glu Asn Pro Val Val Lys Ala Ile Ala Asp Ala Leu Ser
1          5          10          15
His Val Asn Asp Pro Glu Ile Lys Arg Pro Ile Thr Asp Leu Asn Met
20          25          30
Ile Asp Glu Ile Thr Val Asp Glu Gln Gly Arg Ala Phe Val Arg Ile
35          40          45
Leu Leu Thr Val Ala Gly Cys Pro Leu Lys Thr Glu Leu Arg Glu Gln
50          55          60
Ala Thr Glu Ala Val Arg Ser Val Asp Gly Val Thr Ser Val Ser Val
65          70          75          80
Glu Leu Gly Thr Met Thr Asp Glu Gln Arg Asp Ala Leu Lys Val Gln
85          90          95
Leu Arg Gly Asp Val Pro Glu Arg
100

```

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

```

gtacggcttc gagagggcta cagtgtccga gaggtcacac tggccaaagg aggggtcccaa
60

```

ttggaggtaa agctgggtgct gctgtggaaa cacaacatgc gcattgagta tgtggctatg
 120
 gcatcctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa
 180
 ggcggctacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg
 240
 tategtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac
 300
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttctgac
 360
 agcaccaaga gcggagtgcc actcttctac atccctccag gctccaccac cccggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgcccagt ttgctgecta ctggaagccc
 480
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcctgggtgct
 540
 aatcctggag catgacacac caatcccca gcaacttgac accccgggca gcaatgggag
 600
 ctactacgga gagaagacaa cgcgt
 625

<210> 1484
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 1484
 Val Arg Leu Arg Glu Gly Tyr Ser Val Arg Glu Val Thr Leu Ala Lys
 1 5 10 15
 Gly Gly Ser Gln Leu Glu Val Lys Leu Val Leu Leu Trp Lys His Asn
 20 25 30
 Met Arg Ile Glu Tyr Val Ala Met Ala Ser Trp Pro Leu Glu Pro Glu
 35 40 45
 Gly Pro Arg Val Thr Arg Val Glu Val Thr Met Glu Gly Gly Tyr Asp
 50 55 60
 Ile Leu His Asp Val Ser Cys Ala Leu Arg Gln Pro Ile Arg Ser Leu
 65 70 75 80
 Tyr Arg Thr His Val Ile Arg Arg Phe Trp Asn Thr Leu Gln Ser Ile
 85 90 95
 Asn Gln Thr Asp Gln Met Leu Ala His Leu Gln Ser Phe Ser Ser Val
 100 105 110
 Pro Glu His Phe Thr Leu Pro Asp Ser Thr Lys Ser Gly Val Pro Leu
 115 120 125
 Phe Tyr Ile Pro Pro Gly Ser Thr Thr Pro Val Leu Ser Leu Gln Pro
 130 135 140
 Ser Gly Ser Asp Ser Ser His Ala Gln Phe Ala Ala Tyr Trp Lys Pro
 145 150 155 160
 Ser Ala Val His Gly Cys Lys Phe Leu Ala Ala Met Ala Ala His Ala
 165 170 175
 Ser Pro Gly Ala Asn Pro Gly Ala
 180

<210> 1485
 <211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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60
ctgttcctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttacttctga atcacctctt aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatggtggga ccttcctatg
240
ccagcccaga gaaaatctgc tttcgccgat ttgattgaag aaaatcctag cagcgттааg
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aaggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcgaccga tagctttgga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcca aaaaattata atgaggcgta tcacttaacg
660
ggtgatggtg ttgtagtgcc ggttgatatc cacatagcca ctcatatttt tgaccagtg
720
atggagcgtg tgtttgagga tgcggcgagg ctgcttaagc aaatcgcata gcatcgtttt
780
ggcaggaaga tatgagcgtt attccgtgta aaaaggacct tcagctaaaa aaattgattg
840
aatcctatgc agaagccttg aaagttgagg ccataaagct aggagagcat ggattaactg
900
aagctgaatt ttatgatagc ggccctcttc ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaat tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taactctcaa ttctgggcgc aaagctgcta ttgagctgaa agggtgccct gatggcaata
1140
acactaacat ctttgatcgc cccctcagg cagaagaatt tgttatctgg agtgatgca
1200
caaatcctgg tgctgacct cagcataatg tttggtctgg gcttcacacc agactaagtg
1260
ctgaaatcat ttcacgggag caaaggattg atggaatggt catttgggac tgggcttggt
1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
ggccgttcaa attgccgcca ccatgttgtt atcttttacc ttcgacgatt ccaagcccaa
1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaatc aaagcgtttc
1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatt
 1560
 atggtaaaga taccgtccgt aaaacgacta tcattcgaaa cggcatggtg gagcgtgaat
 1620
 cggaatgac ggcaataagg cgggtcttaat ttgtgcatgc ctatgctgca tgaatccgca
 1680
 tgatcgtttg aggatcgttt ttgctgagge ccgccagttc tgggtgggctt ttgcttatgt
 1740
 catgcacctg catgaaaacc gctacataaa gcgggcaggc gtggcgggga tacgagcgcg
 1800
 cgcaacgggg tgaaatggtg aatatcaggg gcaatctccg gcacgctggc ggcttgaatc
 1860
 gggtaggggtg agtgagagge agcaataaag aagcgccccg cagaatgctg ctggggcgct
 1920
 gtgagaggtg gtcttgttgt cgcggtgcgg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gcccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc
 2040
 gcagtcgctt ctgcagge
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
1				5				10					15		
Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
		20						25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
		35					40					45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
		50				55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65				70				75						80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
		100						105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
		115				120					125				
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
		130				135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145				150					155					160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165					170						175	
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
		180					185						190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
		195				200					205				
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210		215		220
Val Val Pro Val Val	Ser His Ile Ala Thr	His Ile Phe Asp Pro Val		
225	230	235	240	
Met Glu Arg Val Phe	Glu Asp Ala Ala Gly	Leu Leu Lys Gln Ile Ala		
	245	250	255	

<210> 1487
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 1487
 acgcgtgagg ggaggggatg ctgggcagat cttgtgaggg aaaattcagg aaggacctct
 60
 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
 120
 catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
 180
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
 240
 ttcttggggc ggtgaggtca ggcagggagg tgggtgagag gtcattggggc cgcaggcaaa
 300
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
 360
 gtggtgtgtc ttcttgcaag tggcctgcct ttgggagcat cagccctttc tcctggggac
 420
 tgggagaggc cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
 480
 cacagggcct ctcacggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
 540
 tgctggcggc agaaacgcgt tgccataagc cttctcccca ctgcaggcag gtgtggtcag
 600
 gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
 660
 cccctacat tcctggggca cccactgtag gccaggccct gtgccggatc tgatgataca
 720
 gtgatgacta agtcacagtc cctgcctctg aggcccccat gatgtgccgg gacagccaag
 780
 caaccaata tgttaaaatc cagtgtcagg acccnaggag aag
 823

<210> 1488
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1488
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu
 1 5 10 15
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu
 20 25 30
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg
 35 40 45
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

50 55 60
 Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
 65 70 75 80
 Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
 85 90 95
 Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
 100 105 110
 Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
 115 120 125
 Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
 130 135 140
 Ala Leu Gly Arg Ala
 145

<210> 1489
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 1489
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 120
 gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
 180
 attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
 240
 cgcgtaccgc cgcgcgcgat cctgggtggtg ggcgacatgg gcgaagtcgg cgcacaggga
 300
 aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
 342

<210> 1490
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1490
 Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
 1 5 10 15
 Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
 20 25 30
 Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
 35 40 45
 Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
 50 55 60
 His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
 65 70 75 80
 Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
 85 90 95
 Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
 100 105 110
 Thr Arg

<210> 1491
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1491
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 atgggggtag attaccttctc ttcccagctc gactgggctg gatatcaggt gtccaccaca
 120
 tgggggtcag gtcccactcc caaaggagta gccatcacc acgagtcggc ggtcaatacg
 180
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
 240
 gagctaaact tcgatctatc ggtatacgac atcttcggga tggtcgcgcg ggggtgctacc
 300
 ttggtgttgc catctccagc agacaaacgt gat
 333

<210> 1492
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1492
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
 1 5 10 15
 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
 20 25 30
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
 35 40 45
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
 50 55 60
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
 65 70 75 80
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
 85 90

<210> 1493
 <211> 1316
 <212> DNA
 <213> Homo sapiens

<400> 1493
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 cccttgcccc cgaagccagg ccctgggtca ccctcccacc cgggtgacct tgacttgat
 120
 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
 180
 gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag
 240

atgaggcaga gacccccctcc tcgccggggac atgaccattc ctcgaggcct caacctgccg
 300
 aagccgcccc tcccgcccca agtggaggaa gagtattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggtgat cgagaaaaac
 420
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
 480
 attgacaagt acaagaagac gagcaacgcg tcgagacca actttctggc tcccctgccc
 540
 cacgaggtga cccagctccg gctgggggaa gcagcagcgc tggagaacaa cacgggcagc
 600
 gaagccacgg gccctcccc gcccctgctt gacgcaccgc atggtgtcat ggactcgggg
 660
 ttgccatggt ctaaagactg gaagggcagt aaggatgtcc tgaggaaggc atcttcagac
 720
 atgtctgcgt cagcaggcta cgaggagatc tcagaccccg acatggagga gaagcccagc
 780
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
 840
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg
 900
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa
 960
 cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
 1020
 gtcttggcca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
 1080
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc tcccccaaaa acggagccac ctcagggcga agaccaagtc
 1200
 gacatctgca acctcaggag taagctcagg cctgccaaagt cccaagacaa gtccttgttg
 1260
 gatggggagg gccccaggc agtagggggc caagacgtgg ccttcagccg aagctt
 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

Xaa	Tyr	Gln	Gly	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Ser	Tyr	Leu	Lys	Lys
1				5				10						15	
Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
		20						25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
		35					40					45			
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
	50					55				60					
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65				70				75						80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

85																90																95															
Leu	Asn	Leu	Pro	Lys	Pro	Pro	Ile	Pro	Pro	Gln	Val	Glu	Glu	Glu	Tyr																																
100																105																110															
Tyr	Thr	Ile	Ala	Glu	Phe	Gln	Thr	Thr	Ile	Pro	Asp	Gly	Ile	Ser	Phe																																
115																120																125															
Gln	Ala	Gly	Leu	Lys	Val	Glu	Val	Ile	Glu	Lys	Asn	Leu	Ser	Gly	Trp																																
130																135																140															
Trp	Tyr	Ile	Gln	Ile	Glu	Asp	Lys	Glu	Gly	Trp	Ala	Pro	Ala	Thr	Phe																																
145																150																155															
Ile	Asp	Lys	Tyr	Lys	Lys	Thr	Ser	Asn	Ala	Ser	Arg	Pro	Asn	Phe	Leu																																
165																170																175															
Ala	Pro	Leu	Pro	His	Glu	Val	Thr	Gln	Leu	Arg	Leu	Gly	Glu	Ala	Ala																																
180																185																190															
Ala	Leu	Glu	Asn	Asn	Thr	Gly	Ser	Glu	Ala	Thr	Gly	Pro	Ser	Arg	Pro																																
195																200																205															
Leu	Pro	Asp	Ala	Pro	His	Gly	Val	Met	Asp	Ser	Gly	Leu	Pro	Trp	Ser																																
210																215																220															
Lys	Asp	Trp	Lys	Gly	Ser	Lys	Asp	Val	Leu	Arg	Lys	Ala	Ser	Ser	Asp																																
225																230																235															
Met	Ser	Ala	Ser	Ala	Gly	Tyr	Glu	Glu	Ile	Ser	Asp	Pro	Asp	Met	Glu																																
245																250																255															
Glu	Lys	Pro	Ser	Leu	Pro	Pro	Arg	Lys	Glu	Ser	Ile	Ile	Lys	Ser	Glu																																
260																265																270															
Gly	Glu	Leu	Leu	Glu	Arg	Glu	Arg	Glu	Arg	Gln	Arg	Thr	Glu	Gln	Leu																																
275																280																285															
Arg	Gly	Pro	Thr	Pro	Lys	Pro	Pro	Gly	Val	Ile	Leu	Pro	Met	Met	Pro																																
290																295																300															
Ala	Lys	His	Ile	Pro	Pro	Ala	Arg	Asp	Ser	Arg	Arg	Pro	Glu	Pro	Lys																																
305																310																315															
Pro	Asp	Lys	Ser	Arg	Leu	Phe	Gln	Leu	Lys	Asn	Asp	Met	Gly	Leu	Glu																																
325																330																335															
Cys	Gly	His	Lys	Val	Leu	Ala	Lys	Glu	Val	Lys	Lys	Pro	Asn	Leu	Arg																																
340																345																350															
Pro	Ile	Ser	Lys	Ser	Lys	Thr	Asp	Leu	Pro	Glu	Glu	Lys	Pro	Asp	Ala																																
355																360																365															
Thr	Pro	Gln	Asn	Pro	Phe	Leu	Lys	Ser	Arg	Pro	Gln	Val	Arg	Pro	Lys																																
370																375																380															
Pro	Ala	Pro	Ser	Pro	Lys	Thr	Glu	Pro	Pro	Gln	Gly	Glu	Asp	Gln	Val																																
385																390																395															
Asp	Ile	Cys	Asn	Leu	Arg	Ser	Lys	Leu	Arg	Pro	Ala	Lys	Ser	Gln	Asp																																
405																410																415															
Lys	Ser	Leu	Leu	Asp	Gly	Glu	Gly	Pro	Gln	Ala	Val	Gly	Gly	Gln	Asp																																
420																425																430															
Val	Ala	Phe	Ser	Arg	Ser																																										
435																																															

<210> 1495

<211> 329

<212> DNA

<213> Homo sapiens

<400> 1495

agatctctgt cccgtagagg tgccacctca tcctccatga gagctgtgct ttgctttctt
60

ctggaggctg caaggaggat ggcccccatc acggcggacc tacatgctgg gagtccggga
 120
 gagggcaggc cgcgacatg gggcatgtgg cgatgtgttt caccaccac tcccgcctga
 180
 agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctctgcagc
 240
 agaccacct cctcagcctc cttccctga aggctgggca tggcctggac aaaggggtgc
 300
 ctctctgct gtgccatgct gacgtggca
 329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu	
1			5					10					15		
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
		20					25				30				
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35				40					45				
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55				60					
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65				70					75						80
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
			85					90					95		
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgacacggt tggcggccga cttggaagcc gctgcagcac
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 ttgacgcggg gcgatctcga agcggttcggt cttggcctga cggtegatgg ctgcggcggtg
 120
 ccggttgatcg cggaatgcg acgggtgggg cagggcggtgc ggccgacacc accgcaagaa
 180
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
 240
 caagaagcgg atcccgcagc tgctgcgtgt tgagctcact gaacttaccg gcccgatcga
 300
 gcagccttac gcgccgatg caggtcattc tttcgggcca cgcgt
 345

<210> 1498

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1498

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Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1           5           10           15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
 20           25           30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
 35           40           45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
 50           55           60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
 65           70           75           80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ala Ser Lys
 85           90           95
Ser Ala Ala Asn Arg Ala Pro Glu
          100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

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aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttcgctc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcat tctttggctg
180
gatgcacaat cacaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgcgg agtatatttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1           5           10           15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
 20           25           30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
 35           40           45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
 50           55           60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```


<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
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 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 gggctcatga cgacccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct
 180
 gtgagtcctg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgtg gtggtgccag
 360
 attcacgggt accgaaaccc ggtcctcgac gagggccctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttgccgg actcaccat aaggccgcgg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccggggcc cctcgaccgg atcttctctgg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaatcg ctgcgaccgc agcgcgcggc
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

```
<210> 1505
<211> 556
<212> DNA
<213> Homo sapiens
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<210> 1506
<211> 169
<212> PRT
<213> Homo sapiens
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1244

130		135		140
Gly Gln Leu Ala Asp	Gly Ile Asp Gln Phe Thr	Gly Asn Leu Val Gly		
145	150	155	160	
Tyr Arg Thr Glu Ile	Arg Gln Tyr Ala			
	165			

<210> 1507
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 1507
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 ccagttacct ccacttgctc tgccttggtc acgtggggct tatggggatt acaattcaag
 120
 gtgagacttg ggtggggaca cagtgggaaca tgaagtgtgc cacgctgggt ggatgacgcc
 180
 ctctccccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
 240
 aagggcagaa tgtacaggaa cagagtgaga ttgcagggc ctggggctga gggaggggac
 300
 gcactagagg aaggcaaagg ggagcctcct ggggtgtggg agcactttct gtcttgggtt
 360
 tgggtggtggc tgcacagtgg cccacaccgc tcagagctca cctgcctgca cccaggccct
 420
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 480
 cgcaccggta cctggggacc gggggctctc ggtgatcatc ccgagctcca agacagaagc
 540
 tggactacag ccgtgctgag tggagggggt tgggtggctgg gtgcccgcct cctattgctc
 600
 ctgcagactc tggggtctcg ggcgccccca gtggggcaat gtgggctgct gcagggaaact
 660
 cacgcgt
 667

<210> 1508
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1508
 Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly
 1 5 10 15
 Asp Ala Leu Glu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
 20 25 30
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
 35 40 45
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
 50 55 60
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
 65 70 75 80
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

```

      85              90              95
Ser Trp Thr Thr Ala Val Leu Ser Gly Gly Val Trp Trp Leu Gly Ala
      100              105              110
Arg Leu Leu Leu Leu Leu Gln Thr Leu Gly Ser Arg Ala Pro Pro Val
      115              120              125
Gly Gln Cys Gly Leu Leu Gln Gly Thr His Ala
      130              135

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<210> 1509
 <211> 463
 <212> DNA
 <213> Homo sapiens

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<400> 1509
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ggtctggctg actccaaagt tgtggctttt gttggttttc ttgttctgtc gcgttttaga
120
aagggctagg aaccgagcac tgggcgttgg gcttactctc ctcctatggt gacctgggag
180
tggtgcccaa ggcgctctct tcccagcacc tcagggtcct cactggtaaa ggagggagtg
240
attggaatgt cgccaaagtt acttggtctc ggaattctgt ggctattcac gtggactctg
300
gatggcggtc accaagtaga agagggggccc tgggatagag agaagtctcc tctcctgtc
360
ctgatttccc aggcctctcc ctctcctggc cctcctcctt ttcttccact tccccggatt
420
cccttcgagt ttggttgcaa ctttaatttt nngttccgat tca
463

```

<210> 1510
 <211> 99
 <212> PRT
 <213> Homo sapiens

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<400> 1510
Met Val Thr Trp Glu Trp Cys Pro Arg Arg Ser Leu Pro Ser Thr Ser
1      5      10      15
Gly Ser Ser Leu Val Lys Glu Gly Val Ile Gly Met Ser Pro Lys Leu
20     25     30
Leu Gly Ser Gly Ile Leu Trp Leu Phe Thr Trp Thr Leu Asp Gly Gly
35     40     45
His Gln Val Glu Glu Gly Pro Trp Asp Arg Glu Lys Ser Pro Leu Leu
50     55     60
Leu Leu Ile Ser Gln Ala Ser Pro Ser Pro Gly Pro Pro Ser Phe Leu
65     70     75     80
Pro Leu Pro Arg Ile Pro Phe Glu Phe Gly Cys Asn Phe Asn Phe Xaa
85     90     95
Phe Arg Phe

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<210> 1511
 <211> 633

<212> DNA

<213> Homo sapiens

<400> 1511

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gccggcaccg gcgtcaaggc catggcgctg ggcccgggat gggtagacac cgaattccac
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tcacgcgcca acgtcaccgg caaccatctg ceggactttt tctggatcga cgccgaagtt
120
ctggtacgcg aggctctcaa cgaccttgac catgacaagg tagtatccat tcctaccccg
180
ctctggaagt tcttcacgcg agtggccaca cataccccac gttccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggagggc
300
gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
360
gtccgccgcg acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt
420
cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacgggt ccttacgtcg
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc ctteccaagc
540
ggctgtcaaa gtacctagct accggggccg ctgctgacta tttcttcacc gtctggtgga
600
aggccatcgc tccggtgctc ttcttcaacg cgt
633

```

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

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Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
1           5           10           15
Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
20           25           30
Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
35           40           45
Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
50           55           60
Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
65           70           75           80
Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
85           90           95
Thr Pro Gly Gly Glu Ala
100

```

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

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<210> 1514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1514

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			20					25				30			
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
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Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
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Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
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Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
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<210> 1515

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1515

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<210> 1516
 <211> 240
 <212> PRT
 <213> Homo sapiens

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 Ile Met Asp His Thr Pro Glu Ser Asn Tyr Glu Pro Asp Leu Thr Asp
 35 40 45
 Asp Ala Thr Ser Val Pro Leu Ala Val Val Ile Asp Asp Pro Gly Pro
 50 55 60
 Pro Thr Pro Ile Ala Arg Arg His Asp Ile Ser Glu Ser Gly Ile Tyr
 65 70 75 80
 Glu Thr His Val Lys Gly Leu Thr Arg Leu His Pro Leu Val Pro Glu
 85 90 95
 His Leu Arg Ser Thr Tyr Ala Gly Leu Ala Tyr Pro Ala Val Ile Glu
 100 105 110
 His Leu Lys Ser Ile Gly Val Thr Ala Ile Glu Leu Leu Pro Val Gln
 115 120 125
 Gln Phe Val Ser Glu Pro Phe Ile Val Gly Arg Gly Leu Ser Asp Tyr
 130 135 140
 Trp Gly Tyr Asn Thr Leu Gly Phe Phe Ala Pro His Ala Ala Tyr Cys
 145 150 155 160
 Ser Val Gly Ser Met Gly Thr Gln Val Arg Glu Phe Lys Asp Met Val
 165 170 175
 Thr Ser Phe His Glu Ala Gly Ile Glu Val Phe Leu Asp Val Val Tyr
 180 185 190
 Asn His Thr Gly Glu Gly Gly His Glu Gly Pro Thr Leu Ser Phe Arg
 195 200 205
 Gly Ile Asp His Glu Ser Tyr Tyr Arg Leu Thr Asn Asp His Arg Asn
 210 215 220
 Asp Tyr Asp Val Thr Gly Cys Gly Asn Ser Val Asp Thr Ser His Pro
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<210> 1517
 <211> 497
 <212> DNA
 <213> Homo sapiens

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<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518
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 20 25 30
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 35 40 45
 Leu Phe Pro Phe Leu Leu Ala Gly Phe Gly Thr Val Ala Ala Gly Met
 50 55 60
 Val Leu Asp Ile Val Gln His Trp Glu Val Phe Gln Lys Val Thr Glu
 65 70 75 80
 Val Phe Ile Leu Val Pro Ala Leu Leu Gly Leu Lys Gly Asn Leu Glu
 85 90 95
 Met Thr Leu Ala Ser Arg Leu Ser Thr Ala Ala Asn Ile Gly His Met
 100 105 110
 Asp Thr Pro Lys Glu Leu Trp Arg Met Ile Thr Gly Asn Met Ala Leu
 115 120 125
 Ile Gln Val Gln Ala Pro Val Val Gly Phe Leu Ala Ser Ile Ala Ala
 130 135 140
 Val Val Phe Gly Trp Ile Pro Asp Gly His Phe Ser Ile Pro His Ala
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 Phe Leu Leu Cys Gly
 165

<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens

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1980
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2076

<210> 1520
<211> 692
<212> PRT
<213> Homo sapiens

<400> 1520
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Ala Cys Met Ala Thr Cys His Ser Leu Thr Lys Ile Glu Gly Val Leu
35 40 45
Ser Gly Asp Pro Leu Asp Leu Lys Met Phe Glu Ala Ile Gly Trp Ile
50 55 60
Leu Glu Glu Ala Thr Glu Glu Thr Ala Leu His Asn Arg Ile Met
65 70 75 80
Pro Thr Val Val Arg Pro Pro Lys Gln Leu Leu Pro Glu Ser Thr Pro
85 90 95
Ala Gly Asn Gln Glu Met Glu Leu Phe Glu Leu Pro Ala Thr Tyr Glu
100 105 110
Ile Gly Ile Val Arg Gln Phe Pro Phe Ser Ser Ala Leu Gln Arg Met
115 120 125
Ser Val Val Ala Arg Val Leu Gly Asp Arg Lys Met Asp Ala Tyr Met
130 135 140
Lys Gly Ala Pro Glu Ala Ile Ala Gly Leu Cys Lys Pro Glu Thr Val
145 150 155 160
Pro Val Asp Phe Gln Asn Val Leu Glu Asp Phe Thr Lys Gln Gly Phe
165 170 175
Arg Val Ile Ala Leu Ala His Arg Lys Leu Glu Ser Lys Leu Thr Trp
180 185 190
His Lys Val Gln Asn Ile Ser Arg Asp Ala Ile Glu Asn Asn Met Asp
195 200 205
Phe Met Gly Leu Ile Ile Met Gln Asn Lys Leu Lys Gln Glu Thr Pro
210 215 220
Ala Val Leu Glu Asp Leu His Lys Ala Asn Ile Arg Thr Val Met Val

225					230					235				240
Thr	Gly	Asp	Ser	Met	Leu	Thr	Ala	Val	Ser	Val	Ala	Arg	Asp	Cys Gly
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Lys	Asp	Gly	Lys	Val	Ala	Lys	Ile	Asn	Trp	His	Tyr	Ala	Asp	Ser Leu
		275					280					285		
Thr	Gln	Cys	Ser	His	Pro	Ser	Ala	Ile	Asp	Pro	Glu	Ala	Ile	Pro Val
	290					295					300			
Lys	Leu	Val	His	Asp	Ser	Leu	Glu	Asp	Leu	Gln	Met	Thr	Arg	Tyr His
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Phe	Ala	Met	Asn	Gly	Lys	Ser	Phe	Ser	Val	Ile	Leu	Glu	His	Phe Gln
			325					330					335	
Asp	Leu	Val	Pro	Lys	Leu	Met	Leu	His	Gly	Thr	Val	Phe	Ala	Arg Met
		340					345					350		
Ala	Pro	Asp	Gln	Lys	Thr	Gln	Leu	Ile	Glu	Ala	Leu	Gln	Asn	Val Asp
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Tyr	Phe	Val	Gly	Met	Cys	Gly	Asp	Gly	Ala	Asn	Asp	Cys	Gly	Ala Leu
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Lys	Arg	Ala	His	Gly	Gly	Ile	Ser	Leu	Ser	Glu	Leu	Glu	Ala	Ser Val
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Ala	Ser	Pro	Phe	Thr	Ser	Lys	Thr	Pro	Ser	Ile	Ser	Cys	Val	Pro Asn
			405					410					415	
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		420					425					430		
Lys	Phe	Met	Ala	Leu	Tyr	Ser	Ile	Ile	Gln	Tyr	Phe	Ser	Val	Thr Leu
	435					440					445			
Leu	Tyr	Ser	Ile	Leu	Ser	Asn	Leu	Gly	Asp	Phe	Gln	Phe	Leu	Phe Ile
450				455						460				
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Ala	Trp	Lys	Glu	Leu	Val	Ala	Gln	Arg	Pro	Pro	Ser	Gly	Leu	Ile Ser
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Gly	Ala	Leu	Leu	Phe	Ser	Val	Leu	Ser	Gln	Ile	Ile	Ile	Cys	Ile Gly
		500					505					510		
Phe	Gln	Ser	Leu	Gly	Phe	Phe	Trp	Val	Lys	Gln	Gln	Pro	Trp	Tyr Glu
	515					520						525		
Val	Trp	His	Pro	Lys	Ser	Asp	Ala	Cys	Asn	Thr	Thr	Gly	Ser	Gly Phe
530					535						540			
Trp	Asn	Ser	Ser	His	Val	Asp	Asn	Glu	Thr	Glu	Leu	Asp	Glu	His Asn
545				550						555				560
Ile	Gln	Asn	Tyr	Glu	Asn	Thr	Thr	Val	Phe	Phe	Ile	Ser	Ser	Phe Gln
			565					570					575	
Tyr	Leu	Ile	Val	Ala	Ile	Ala	Phe	Ser	Lys	Gly	Lys	Pro	Phe	Arg Gln
		580				585						590		
Pro	Cys	Tyr	Lys	Asn	Tyr	Phe	Phe	Val	Phe	Ser	Val	Ile	Phe	Leu Tyr
	595					600						605		
Ile	Phe	Ile	Leu	Phe	Ile	Met	Leu	Tyr	Pro	Val	Ala	Ser	Val	Asp Gln
610					615						620			
Val	Leu	Gln	Ile	Val	Cys	Val	Pro	Tyr	Gln	Trp	Arg	Val	Thr	Met Leu
625				630						635				640
Ile	Ile	Val	Leu	Val	Asn	Ala	Phe	Val	Ser	Ile	Thr	Val	Glu	Asn Phe
			645					650					655	
Phe	Leu	Asp	Met	Val	Leu	Trp	Lys	Val	Val	Phe	Asn	Arg	Asp	Lys Gln

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<210> 1524
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 1524
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 35 40 45
 Leu Glu Asp Ser Leu Leu Gly Lys Met Leu Glu Thr Cys Gly Asp Ala
 50 55 60
 Glu Asn Gln Leu Ala Leu Glu Leu Ser Gln His Glu Val Phe Val Glu
 65 70 75 80
 Lys Glu Ile Val Asp Pro Leu Tyr Gly Ile Ala Glu Val Glu Ile Pro
 85 90 95
 Asn Ile Gln Lys Gln Arg Lys Gln Leu Ala Arg Leu Val Leu Asp Trp
 100 105 110
 Asp Ser Val Arg Ala Arg Trp Asn Gln Ala His Lys Ser Ser Gly Thr
 115 120 125
 Asn Phe Gln Gly Leu Pro Ser Lys Ile Asp Thr Leu Lys Glu Gly Met
 130 135 140
 Asp Glu Ala Gly Asn Lys Val Glu Gln Cys Lys Asp Gln Leu Ala Ala
 145 150 155 160
 Asp Met Tyr Asn Phe Met Ala Lys Glu Gly Glu Tyr Gly Lys Phe
 165 170 175

<210> 1525
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1525
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<210> 1526
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1526
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 35 40 45
 Tyr Glu Leu Pro Met Ala Gln Met Asn Arg Arg Leu Ser Gly Ile Asp
 50 55 60
 Thr Val Phe Leu Leu Thr Asp Glu Lys Tyr Gly Tyr Ile Ser Ser Ser
 65 70 75 80
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 85 90 95
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<210> 1527
 <211> 371
 <212> DNA
 <213> Homo sapiens

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 371

<210> 1528
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 1528

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Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
      35           40           45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
      50           55           60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
      65           70           75           80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
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Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser
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Pro	Ser	Val	Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val
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Gly	Leu	Ala	Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Leu	Ala
65					70					75				80	
Leu	Cys	Pro	Ala	Gln	Gly	Ser	Pro	Ser	Val	Gly	Phe	Ala	Leu	Cys	Leu
			85					90						95	
Ala	Gln	Ala	Ala	Gln	Gly	Asn	Gly	Gly	Thr	Ser	Arg	Ala	Gly	Pro	Ala
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<210> 1531

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1531

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420
accccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgcgt
480
tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgateccct catacgcgag ccgccgatat ggcccccgag tgaggcccct cagttcgcgc
600
tgacgcatgc cgtctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
660
cgggttcggg gctggcgacg tgagccgtgt cacaagttca cgagctggct caccgcgccg
720
cgagag
726

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<210> 1532

<211> 178

<212> PRT

<213> Homo sapiens

WO 00/58473

<400> 1532
 Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
 1 5 10 15
 Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
 20 25 30
 Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
 35 40 45
 Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
 50 55 60
 Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
 65 70 75 80
 Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
 85 90 95
 Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
 100 105 110
 Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
 115 120 125
 His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
 130 135 140
 Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
 145 150 155 160
 Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
 165 170 175
 Pro Glu

<210> 1533
 <211> 364
 <212> DNA
 <213> Homo sapiens

<400> 1533
 natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcggt ctggctggcg
 60
 gagattattc acagcgaacg ggcgaccggc ggtgcgccgc ttaacgtcct gctgacgctg
 120
 gttaaaatgc acgtcggctt gccgttgacg gcggctcggtc ttatcggcga agacagcgat
 180
 ggcgattaca ttatggcgat gtcgaccag taccacgtca atcgccagcg ggtacagcgc
 240
 accacgtttg cccccacgtc gatgtcgacg gtgatgaccg atcccactgg gcagcgcacc
 300
 tttttccatt cgctgcccgc caatcgctg ctgatctcc ccgcctttga tcgactcgac
 360
 gcgt
 364

<210> 1534
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1534
 Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

<400> 1536
Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
 1                    5                    10                    15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
 20                    25                    30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
 35                    40                    45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
 50                    55                    60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
65                    70                    75                    80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```


				85						90					95				
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe					
			100					105					110						

<210> 1537
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1537
 ccactgcgg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt
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 ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttggt
 120
 cctcacgcgc cccggggaga tgggtggcca gctggccgtg ctcaccgagg agacctcgtc
 180
 ggcgtggtgg agacactgac ccaccaggcc cgggcgacca cgggtgcatgc cgttcgggac
 240
 tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
 294

<210> 1538
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1538
 Pro Leu Ala Ala Pro Pro Glu Pro Ser Arg Val Ser Gly Arg Gln His
 1 5 10 15
 Pro Val Arg Val Leu Gly Ala Ala Ala Arg Val Pro Ala Glu Asp Arg
 20 25 30
 Gln Pro Gly Gly His Leu Leu Val Pro His Ala Pro Arg Gly Asp Gly
 35 40 45
 Gly Pro Ala Gly Arg Ala His Arg Gly Asp Leu Val Gly Val Val Glu
 50 55 60
 Thr Leu Thr His Gln Ala Arg Ala Thr Thr Val His Ala Val Arg Asp
 65 70 75 80
 Ser Glu Leu Ala Lys Leu Pro Ala Gly Ala Leu Thr Ser Ile Lys Arg
 85 90 95
 Arg Tyr

<210> 1539
 <211> 1015
 <212> DNA
 <213> Homo sapiens

<400> 1539
 acgcgttcgg gcgtcaggca cacgcattctc aacagatgtg gctgacaccc aaggcagtcg
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 gcctcagtgc cctgtcaccc acctagaacc tggtcacagc atgtcatccg ggctgctctg
 120
 gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa
 180

caggctgctc agccaggggc aggagaaggt gggtcaggct ccccggggac ctcaggccct
 240
 gacgcaccc ggcctcaccc taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggctgg gccatcttgc cctgtttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcagggtct aggccagtca agaggggtggc tgagaagcag
 420
 gaggagcctc agagaccctc cctcgaag cactgggggt tccacctcac aagcggcagg
 480
 ttgcgtttgg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac catcgctccag gcctggccca ggagccgggt aggaacctgg ggctgtgtg
 600
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca
 720
 gcacccccag tctaattgggt gccctgccca ctctcctgag ttcccgtgca gagctcccc
 780
 caacacctca gccttcacct ttctcagtta atcaaaagat tccaaaaaaa gcaaaccat
 840
 cagaacggct tcctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccggat gacatgctat gaacaggttt taggtgggtg acagggcact gaggccgact
 960
 gccttggtg tcagccacat ctgttgagat gcgtgtgcct gacgcccga cgcgt
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His Pro Arg Gln Ser Ala Ser Val Pro Cys His Pro Pro Arg Thr Cys
 1 5 10 15
 Ser Gln His Val Ile Arg Ala Ala Leu Ala Leu Thr Gly His Asp Tyr
 20 25 30
 Leu Ser Leu His Thr Val Ala Ala Leu Gln Ala Lys Lys Gln Ala Ala
 35 40 45
 Gln Pro Gly Ser Gly Glu Gly Gly Ser Gly Ser Pro Gly Thr Ser Gly
 50 55 60
 Pro Asp Ala Ser Trp Pro His Pro Arg Pro Pro Leu Ser Gly Gln Pro
 65 70 75 80
 Gly Ser Ala Glu Pro Gly Thr His Gly
 85

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaaag ggaagcttag
60
cccgccgctg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgccccg
120
gctatcgcg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgcccccgga
180
gctgctggtg caggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc
240
cagtgtgccg cgcttggcgc gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgctgcccc
360
acaacgaaga caaagaggag ttcccgtgt gcgccctggc gcgctactga ctgcgcgcgc
420
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatggtgctc caagaggcag cttgtggacc
600
tgggtgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc
720
tggatgtgta tgaaaaggaa gtggtcaagt tctcagcctc acctgaccgc gtccttcagt
780
ggactgagag gggctgccga caggtctccc acgtcttcac caactttggc aagggcatcc
840
gtacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtgac ccactccagt gtgagggtca ggatccgtct gtccatagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccagggt cagtggctca cacctgtggg
1020
atcctccac tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaaatddd ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cacgacaggt gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattgtt ttgttattca tttaatgact ttccctgctg ttacctaat acaaattgga
1380
tggaactgtg tttttttctg ctttgttttt tcagtttgct gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtc agttggatc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1 5 10 15
 Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
 20 25 30
 Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
 35 40 45
 Glu Trp Glu Phe Gln Lys Tyr Gly His
 50 55

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgccctc ctatcggttg
 60
 gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
 120
 accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
 180
 ccacggctcg agccgagccg acctcgtttg ttttgaaact cgagcaccca aagacttcag
 240
 ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggccccc
 300
 cncnccnc c
 311

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1 5 10 15
 Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
 20 25 30
 Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
 35 40 45
 Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
 50 55 60
 Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
 65 70 75 80
 Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
 85 90 95

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545

ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt
 60
 caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
 120
 cgtctctgtc tcaagcacct cgctgtttc caggttcaag gcctggatag tgcgagtgtc
 180
 gtactggteg atcacttcca ccgagtggtc tgggtagccc cttgccattc gctttatgat
 240
 ctcaaccata gatgcatttg gcatgttcca gagcttgtag tctttaacga tctctctggc
 300
 gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
 360
 ac
 362

<210> 1546

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1546

Met	Val	Lys	Ser	Cys	Glu	Leu	Ala	His	Leu	Thr	Asp	Arg	Leu	Cys	Leu
1				5					10					15	
Lys	His	Leu	Ala	Cys	Phe	Gln	Val	Gln	Gly	Leu	Asp	Ser	Ala	Ser	Val
		20						25					30		
Val	Leu	Val	Asp	His	Phe	His	Arg	Val	Val	Trp	Val	Ala	Pro	Cys	His
		35					40					45			
Ser	Leu	Tyr	Asp	Leu	Asn	His	Arg	Cys	Ile	Trp	His	Val	Pro	Glu	Leu
	50					55				60					
Val	Leu	Leu	Asn	Asp	Leu	Ser	Gly	Val	Val	Glu	Asn	Leu	His	Ala	Ile
65					70					75					80
Val	Arg	Met	Gly	His	Cys	Gly	Asp	Val	Pro	Ser	Arg				
				85							90				

<210> 1547

<211> 429

<212> DNA

<213> Homo sapiens

<400> 1547

cgcggttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcggtc
 60
 ctgccgcggt cggtgtggtt cagcgccgtg tcggcggtgga acctggagcg cgagcgccgt
 120
 cgcaaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
 180
 agcgtggtgt tgtggggggg gatgattgtc tggttgggcg cggcggtgat tccgttctcg
 240
 atcattcagg gtgtctacgg gttctcggtt ctggaagtgg tcaactacgt cgagcactac
 300
 gggcttaaac gccagaagtt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg
 360

tggaacagca accggattgt caccaatata tttctgttcc aacttcagcg gcattccgac
420

caccatgcc

429

<210> 1548

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1548

Arg	Val	Ala	Thr	Pro	Glu	Asp	Pro	Ala	Ser	Ser	Arg	Leu	Gly	Glu	Ser
1			5						10					15	
Phe	Trp	Ala	Phe	Leu	Pro	Arg	Ser	Val	Trp	Phe	Ser	Ala	Val	Ser	Ala
		20						25				30			
Trp	Asn	Leu	Glu	Arg	Glu	Arg	Leu	Arg	Lys	Leu	Gly	Leu	Pro	Ala	Trp
	35						40					45			
His	Trp	Lys	Asn	Ala	Val	Leu	Ser	Ala	Trp	Met	Tyr	Ser	Val	Val	Leu
	50					55				60					
Trp	Gly	Val	Met	Ile	Val	Trp	Leu	Gly	Ala	Ala	Val	Ile	Pro	Phe	Leu
65				70				75						80	
Ile	Ile	Gln	Gly	Val	Tyr	Gly	Phe	Ser	Leu	Leu	Glu	Val	Val	Asn	Tyr
		85						90						95	
Val	Glu	His	Tyr	Gly	Leu	Lys	Arg	Gln	Lys	Leu	Pro	Asn	Gly	Arg	Tyr
		100						105					110		
Glu	Arg	Cys	Ser	Pro	Arg	His	Ser	Trp	Asn	Ser	Asn	Arg	Ile	Val	Thr
		115					120					125			
Asn	Ile	Phe	Leu	Phe	Gln	Leu	Gln	Arg	His	Ser	Asp	His	His	Ala	
	130					135					140				

<210> 1549

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1549

gtcgacaggc tccagggttc tgttttgtag tgcacccgct gtggtgcaac atgcgtctgg
60
gcacaccagc gtcgcccgtt tcctgttgta gtctttctctc tctgactcca ggggtattgg
120
gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
180
agaatccctg cactccacca ttcttgggca acactccctc taggattttg gtctcccttt
240
tctctctggg ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt
300
ggttttcttc actccccag ctgcgcgtg ggaggcgcca ctgcaaactt ccctggggtc
360
tcccagctgc tcagagatcc ccatgccctt ccctgatcag ctccctgccc gggtctcttc
420
ccgacgcggc tgcattgata ttc
443

<210> 1550

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1550

```

Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1           5           10           15
Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
          20           25           30
Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
          35           40           45
Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
          50           55           60
Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
65           70           75           80
Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
          85           90           95
Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
          100          105          110
Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
          115          120          125
Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
          130          135

```

<210> 1551
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1551

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ccatggatcac cccacctctg gcactcaaca tgacttggct gccacacacc aggaaacctc
60
agaggagcag ccagctggcc aagcaccctt gcccttgccc tgcgggctcc acaaaagctg
120
gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
180
ttggagatgg aacaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
240
gtccttctc ccatcttggtc ctaacacagc ctccccagga gaccaggggc atcccnnnnc
300
cccnnc
306

```

<210> 1552
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1552

```

Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1           5           10           15
Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
          20           25           30
Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

```

      35          40          45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
  50          55          60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
  65          70          75          80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
      85          90          95
Ile Pro Xaa Pro Xaa
      100

```

<210> 1553

<211> 657

<212> DNA

<213> Homo sapiens

<400> 1553

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atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcggggccac
60
acgctactca tcctggggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cgggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccattgctg
300
attgcccgtt ttggccatgg ctccagctgag ctggagaact gcctctatgt ggtggggggga
360
cacacatccc tggcaggggt cttcccggcc tcgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgccggga tggcgtcagc
480
aatgccgcag tgggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgtat gacccctcgg agaacagggtg gacgatcaag
600
gccgagtgcc ccagccttg gcggtacaca gccgctgccg tcctggggcag ccagatc
657

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<210> 1554

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1554

```

Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
  1          5          10          15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
  20          25          30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
  35          40          45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
  50          55          60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```



```

65              70              75              80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
      85              90              95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
      100             105             110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
      115             120             125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
      130             135             140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145             150             155
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
      165             170             175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
      180             185             190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
      195             200             205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
      210             215

```

<210> 1555
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 1555
acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
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ggaggagcct gccttgcggc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaagggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556
 <211> 102
 <212> PRT
 <213> Homo sapiens

```

<400> 1556
Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1           5           10           15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
      20           25           30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
      35           40           45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
      50           55           60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

65 70 75 80
 Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser
 85 90 95
 Leu Pro Ser Ser His Ala
 100

<210> 1557
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1557
 gtgcacagac ttttcgagcg ggccattaag tggtttacgt ctgggatcgg ctccgctttc
 60
 tcgcattttt cggatcaggt caaattctgt gctcggcatt gacaggaaat tgacgtgtat
 120
 cagtcgattc tttgcagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac
 180
 gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg
 240
 ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccggaagc
 300
 gaagctcgat gggcagcagg cgcattgagga acccggcgcc attgaatcgt gaggcgctgg
 360
 cggagcgcg cccgttcaaa tgcgacgcgt
 390

<210> 1558
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1558
 Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser
 1 5 10 15
 Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln
 20 25 30
 Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser
 35 40 45
 Thr Trp Cys Gly Met Val Val Val Val Leu Leu Ser Ala Tyr Ser Ala
 50 55 60
 Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu
 65 70 75 80
 Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser
 85 90 95
 Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser
 100 105 110
 Val His

<210> 1559
 <211> 556
 <212> DNA
 <213> Homo sapiens

<400> 1559

accggtggcg acggtatcgg tggcgcgctg atccttgccct cggaatcctt cgctgcagag
60
ggtgagtcga agcgacccag cgtccagggtg ggcgaccggt tcatggagaa gctgctcatc
120
gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgcagga ttctggtgcc
180
gccggaatct cctgtgccac ctccgagctg gccagtgtct gcgacgggtgg catgcacgtc
240
gagctcgacc gcgttccgct gcgcgacccg aacctcgccc ctgaagagat cctcatgagc
300
gagtcccagg agcggatggc cgcggtggtg cgccccgac agcttgaccg cttcatggag
360
atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga
420
cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac
480
gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
540
aacgacgcta acgcgt
556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560

Thr	Gly	Gly	Asp	Gly	Ile	Gly	Gly	Ala	Ser	Ile	Leu	Ala	Ser	Glu	Ser
1				5					10					15	
Phe	Ala	Ala	Glu	Gly	Glu	Ser	Lys	Arg	Pro	Ser	Val	Gln	Val	Gly	Asp
			20					25					30		
Pro	Phe	Met	Glu	Lys	Leu	Leu	Ile	Glu	Cys	Thr	Leu	Asp	Leu	Phe	Asn
		35					40					45			
Ala	Gly	Val	Val	Glu	Ala	Leu	Gln	Asp	Phe	Gly	Ala	Ala	Gly	Ile	Ser
	50					55					60				
Cys	Ala	Thr	Ser	Glu	Leu	Ala	Ser	Ala	Gly	Asp	Gly	Gly	Met	His	Val
65					70					75				80	
Glu	Leu	Asp	Arg	Val	Pro	Leu	Arg	Asp	Pro	Asn	Leu	Ala	Pro	Glu	Glu
			85					90						95	
Ile	Leu	Met	Ser	Glu	Ser	Gln	Glu	Arg	Met	Ala	Ala	Val	Val	Arg	Pro
		100						105					110		
Asp	Gln	Leu	Asp	Arg	Phe	Met	Glu	Ile	Cys	Ala	His	Trp	Gly	Val	Ala
	115						120					125			
Ala	Thr	Val	Ile	Gly	Glu	Val	Thr	Asp	Thr	Gly	Arg	Leu	His	Ile	Asp
	130					135					140				
Trp	Gln	Gly	Glu	Arg	Ile	Val	Asp	Val	Asp	Pro	Arg	Thr	Val	Ala	His
145					150				155					160	
Asp	Gly	Pro	Val	Leu	Asp	Met	Pro	Ala	Ala	Arg	Pro	Trp	Trp	Ile	Asp
			165					170						175	
Glu	Leu	Asn	Glu	Asn	Asp	Ala	Asn	Ala							
		180						185							

<210> 1561
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 1561
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 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccattt tgcattgat tcatctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttggaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgttggttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaagtgc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcattc
 420
 tctctctgtg gcttttaggtc tgacattgta tttgacctt actagt
 466

<210> 1562
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1562
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro
 1 5 10 15
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
 20 25 30
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
 35 40 45
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
 50 55 60
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
 65 70 75 80
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
 85 90 95
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
 100 105 110
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
 115 120 125
 Gly Met
 130

<210> 1563
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1563

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ctgggggggtg tggctggcct gctgtcgggtg tacttgccgc gttgggtgca tgaaacaccg
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 atcttcgctg agatgcagca gcgcaaaacc ctgggtgccg agttgccatt gcgcgcggta
 120
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
 180
 ggtgtggttg tggtcacccat gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
 240
 ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
 300
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
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 420
 ataagtgtac gcgt
 434

<210> 1564
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1564
 Leu Gly Gly Val Phe Gly Leu Leu Ser Val Tyr Leu Pro Arg Trp Leu
 1 5 10 15
 His Glu Thr Pro Ile Phe Ala Glu Met Gln Gln Arg Lys Thr Leu Ala
 20 25 30
 Ala Glu Leu Pro Leu Arg Ala Val Leu Arg Asp His Arg Gly Ala Ile
 35 40 45
 Val Leu Ser Met Leu Leu Thr Trp Leu Leu Ser Ala Gly Val Val Val
 50 55 60
 Val Ile Leu Met Thr Pro Thr Val Leu Gln Thr Val Tyr His Phe Ser
 65 70 75 80
 Pro Thr Val Ala Leu Gln Ala Asn Ser Leu Ala Ile Val Thr Leu Ser
 85 90 95
 Leu Gly Cys Ile Ala Ser Gly Ala Leu Ala Asp Arg Phe Gly Ala Gly
 100 105 110
 Arg Val Leu Val Thr Gly Trp Arg Cys Cys Trp Pro Leu Pro Gly Arg
 115 120 125
 Cys Ile Thr Ala
 130

<210> 1565
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1565
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 60
 agaggggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc
 120
 ctgcattcgg ccatttcttc ccaagaatca ccataaagggt tgtcaaaatc aaggaccctg
 180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt tacccccgag ggagaaaagc
 240
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccaccgt gcattggcga
 300
 acgggggctg cccctatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1566
 Met Ser Gln Arg Val Ser Gly Ser Gly Thr Tyr Trp Thr Met Lys Ala
 1 5 10 15
 Ile Lys Arg Thr Arg Glu Pro Ala Phe Gly His Phe Phe Pro Arg Ile
 20 25 30
 Thr Ile Lys Val Val Lys Ile Lys Asp Pro Asp Pro Val Ile Leu Glu
 35 40 45
 Val Ile Asp Glu Gln Asn Lys Phe Thr Pro Glu Gly Glu Lys Arg Val
 50 55 60
 Val Leu Leu Met Leu Asp Asn Leu Tyr Arg Pro Ser Thr His Arg Ala
 65 70 75 80
 Leu Ala Asn Gly Gly Val Pro Tyr Leu Arg Ser Lys Ser Val Thr Val
 85 90 95
 Asp Leu Val Asp Ser Arg Asp Asn Thr Gly
 100 105

<210> 1567
 <211> 917
 <212> DNA
 <213> Homo sapiens

<400> 1567
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 aagccgctgc actcctgggg gacccagttt gatgcctcca ggaggataag tctgaagccg
 120
 ggttgggaag ggagcggaga ggcccaaaca gagcagcagg cagcgccctc tgctggcacc
 180
 ctggagacag cttcggtgctc gggggccctg ccttctagtc ctccccagct ttcaggacac
 240
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtgggtgggt tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggct caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgcca cagcggggac ctcgagagcta tgccttgata aggcaagtga ggttacatgt
 600
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactgcagct tcagctggcg tggatgggggt gcttacagga gcagcagggc tgagggagat
 780
 gacagcagta cgaatcgtgg ctctcctgag gcctggggtt cctcatatgt aaaatggggg
 840
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag
 900
 ggctgaagag ctgggtc
 917

<210> 1568

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1568

Met	Gly	Pro	Ala	Leu	Pro	His	Val	Phe	Glu	Ser	Gln	His	Leu	Ser	Pro
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Leu	Leu	Cys	Ile	Cys	Gly	Ser	Gln	His	Cys	Leu	Pro	Pro	Tyr	Pro	Asp
			20				25						30		
Ser	Phe	Arg	Arg	Leu	Gly	Gly	Gln	Pro	Gly	His	Phe	Cys	Arg	Asp	Pro
			35				40					45			
Arg	Leu	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Gly	Gly	Leu	Glu	Gly	Arg	Gly
			50			55					60				
Pro	Ala	Ala	Glu	Ala	Val	Ser	Arg	Val	Pro	Ala	Glu	Gly	Ala	Ala	Cys
65					70					75				80	
Cys	Ser	Val	Trp	Ala	Ser	Pro	Leu	Pro	Ser	Gln	Pro	Gly	Phe	Arg	Leu
				85					90					95	
Ile	Leu	Leu	Glu	Ala	Ser	Asn	Trp	Val	Pro	Gln	Glu	Cys	Ser	Gly	Phe
			100					105						110	

Pro

<210> 1569

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1569

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 120
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
360

acagccaacc cggagatct
379

<210> 1570

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1570

Gly	Gly	Pro	Val	Ile	Leu	Leu	Gln	Ala	Gly	Thr	Pro	His	Asn	Leu	Thr
1				5					10					15	
Cys	Arg	Ala	Phe	Asn	Ala	Lys	Pro	Ala	Ala	Thr	Ile	Ile	Trp	Phe	Arg
		20						25					30		
Asp	Gly	Thr	Gln	Gln	Glu	Gly	Ala	Val	Ala	Ser	Thr	Glu	Leu	Leu	Lys
		35					40					45			
Asp	Gly	Lys	Arg	Glu	Thr	Thr	Val	Ser	Gln	Leu	Leu	Ile	Asn	Pro	Thr
		50				55				60					
Asp	Leu	Asp	Ile	Gly	Arg	Val	Phe	Thr	Cys	Arg	Ser	Met	Asn	Glu	Ala
65					70				75					80	
Ile	Pro	Ser	Gly	Lys	Glu	Thr	Ser	Ile	Glu	Leu	Asp	Val	His	His	Pro
			85					90					95		
Pro	Thr	Val	Thr	Leu	Ser	Ile	Glu	Pro	Gln	Thr	Val	Gln	Glu	Gly	Glu
		100						105					110		
Arg	Val	Val	Phe	Thr	Cys	Gln	Ala	Thr	Ala	Asn	Pro	Glu	Ile		
		115					120						125		

<210> 1571

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1571

tgcgcacttt tccgctcccg atgggtcccc tggncgttga tcatgcccga gatgttcac
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atcggcacatct tcttcttctt gccaagcggc caagccgtgc tccagtcttt ccagatggaa
120
gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttccgcaa cctgctggat
180
gacccacact acctgaattc cttccagcgc accgccgtgt tctcggtgct ggtggcaggg
240
gtcgggatcg ccgtgtcact ggggtctggcg atctttgccg accccatcac tccgtcgcca
300
tgtgtacaag acacactgct gatcgtgccc tacgccgtgg caccatgat cgccggc
357

<210> 1572

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1572.

Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

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```

      10      15
1      5      10      15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20      25      30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35      40      45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50      55      60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
      65      70      75      80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85      90      95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100      105      110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573
 <211> 337
 <212> DNA
 <213> Homo sapiens

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<400> 1573
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tattgtacag attttggaaat cggtacagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaact ggccattttt ggaattgggtt ataacaccg
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttggcaa
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaat
337

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<210> 1574
 <211> 95
 <212> PRT
 <213> Homo sapiens

```

<400> 1574
Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      5      10      15
1      5      10      15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20      25      30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35      40      45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50      55      60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
      65      70      75      80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85      90      95

```

<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 catctcgttg ccgaaattgg ggccgatggt gtccatgttg ggcagtctga catgccggtc
 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
 180
 gcccatgtgg aggccgcctt gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcatg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgccagccc gtggccggtg tgcgtcatcg gtgggggtgag cgcattccgat
 360
 gctcaagacg tagcccgggt gggatgtgac ggcctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtac g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
 1 5 10 15
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577

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 ccccatcctg cgggcttgcg cacggttgcg ctogaacccg gcgtcgcgca cgcgcgcacc
 120
 ttgcgcgttg ccggggcagg cttccccgct cgcggccagc gcgccgccgg cgatctggtg
 180
 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag
 240
 cagctcgacg tggcgctcgg gaagagcgcg acacgccatt ttccgga
 287

<210> 1578

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1				5					10					15	
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
			20					25					30		
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35				40					45				
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85					90						95	

<210> 1579

<211> 2829

<212> DNA

<213> Homo sapiens

<400> 1579

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 cgcccctgcc tccgcggctc ggaggcgagc ggaaggtgcc ccggggccga ggcccgtgac
 120
 ggggcggggc ggagcccccg cagtccgggg tcgccggcga gggccatgtc gctgttgggg
 180
 gaccgctac aggccctgcc gccctcggcc gccccacgg ggccgctgct cgcccctccg
 240
 gccggcgca ccctcaaccg cctgcgggag ccgctgctgc ggaggctcag cgagctcctg
 300
 gatcaggcgc ccgagggccg gggctggagg agactggcgg agctggcggg gactcgcggg
 360
 cgctccgcc tcagttgcct agacctggag cagtgttctc ttaaggtact ggagcctgaa
 420
 ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aaggttgac agtcacagaa
 480

ttgagtgatt tcttgcaggc tatggaacac actgaagttc ttcagcttct cagcccccca
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ggaataaaga ttactgtaaa ccagagtgca aaggcagtct tggctggaca gtttgtgaaa
600
ctgtgttgcc gggcaactgg acatcctttt gttcaatata agtggttcaa aatgaataaa
660
gagattccaa atggaaatac atcagagctt atttttaatg cagtgcattgt aaaagatgca
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960
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1020
ggaacctact ggtgtcatgt atataatgat cgagacagtc aagatagcaa gaaggtagaa
1080
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1140
ggtcattcctg ataataaaga gcaacaact gaccagcctt tggcgaagga caagggtgcc
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cttttgatag gaaatatgaa ttaccgggag caccccaagc tcaaagctcc tttggtggat
1260
gtgtacgaat tgactaactt actgagacag ctggacttca aagtggtttc actgttggat
1320
cttactgaat atgagatgag taatgctgtg gatgagtttt tactcctttt agacaaggga
1380
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attgtgtttg gatatgccac gtgtcaagga gcagaagctt ttgaaatcca gcattctgga
1680
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1740
actgtgttac tggatgaagt tgcagaagat atgggtaagt gtcaccttac caaaggcaaa
1800
caggctctag agattcgaag tagtttatct gagaagagag cacttactga tccaatacag
1860
ggaacagaat attctgctga atctcttgtg cggaatctac agtgggcaaa ggctcatgaa
1920
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1980
gctgagtttt ccaatgtcat gatcatctat acaagtatag ttacaaaacc accggagata
2040
ataatgtgtg atgctacgt tactgatttt ccacttgatc tagatattga tccaaaagat
2100

gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga ttttcccaag
 2160
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 gtatgtttat catatcagta ctcaggattg gaagatactg tagaggacaa gcaggaagtg
 2280
 aatgttggga aacctctcat tgctaaatta gacatgcac gaggtttggg aaggaagact
 2340
 tgctttcaaa cttgtcttat gtctaattgg ccttaccaga gttctgcagc cacctcagga
 2400
 ggagcagggc attatcactc attgcaagac ccattccatg gtgtttacca ttcacatcct
 2460
 ggtaatccaa gtaatgttac accagcagat agctgtcatt gcagccggac tccagatgca
 2520
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 2580
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 2640
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 2700
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 2760
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 2820
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 2829

<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35					40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
	50					55					60				
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65					70					75				80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85					90						95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100					105						110	
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
		115					120					125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
	130					135					140				
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145					150					155				160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

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165      170      175
Phe Asn Ala Val His Val Lys Asp Ala Gly Phe Tyr Val Cys Arg Val
180      185      190
Asn Asn Asn Phe Thr Phe Glu Phe Ser Gln Trp Ser Gln Leu Asp Val
195      200      205
Cys Asp Ile Pro Glu Ser Phe Gln Arg Ser Val Asp Gly Val Ser Glu
210      215      220
Ser Lys Leu Gln Ile Cys Val Glu Pro Thr Ser Gln Lys Leu Met Pro
225      230      235      240
Gly Ser Thr Leu Val Leu Gln Cys Val Ala Val Gly Ser Pro Ile Pro
245      250      255
His Tyr Gln Trp Phe Lys Asn Glu Leu Pro Leu Thr His Glu Thr Lys
260      265      270
Lys Leu Tyr Met Val Pro Tyr Ala Asp Leu Glu His Gln Gly Thr Tyr
275      280      285
Trp Cys His Val Tyr Asn Asp Arg Asp Ser Gln Asp Ser Lys Lys Val
290      295      300
Glu Ile Ile Ile Gly Arg Thr Asp Glu Ala Val Glu Cys Thr Glu Asp
305      310      315      320
Glu Leu Asn Asn Leu Gly His Pro Asp Asn Lys Glu Gln Thr Thr Asp
325      330      335
Gln Pro Leu Ala Lys Asp Lys Val Ala Leu Leu Ile Gly Asn Met Asn
340      345      350
Tyr Arg Glu His Pro Lys Leu Lys Ala Pro Leu Val Asp Val Tyr Glu
355      360      365
Leu Thr Asn Leu Leu Arg Gln Leu Asp Phe Lys Val Val Ser Leu Leu
370      375      380
Asp Leu Thr Glu Tyr Glu Met Arg Asn Ala Val Asp Glu Phe Leu Leu
385      390      395      400
Leu Leu Asp Lys Gly Val Tyr Gly Leu Leu Tyr Tyr Ala Gly His Gly
405      410      415
Tyr Glu Asn Phe Gly Asn Ser Phe Met Val Pro Val Asp Ala Pro Asn
420      425      430
Pro Tyr Arg Ser Glu Asn Cys Leu Cys Val Gln Asn Ile Leu Lys Leu
435      440      445
Met Gln Glu Lys Glu Thr Gly Leu Asn Val Phe Leu Leu Asp Met Cys
450      455      460
Arg Lys Arg Asn Asp Tyr Asp Asp Thr Ile Pro Ile Leu Asp Ala Leu
465      470      475      480
Lys Val Thr Ala Asn Ile Val Phe Gly Tyr Ala Thr Cys Gln Gly Ala
485      490      495
Glu Ala Phe Glu Ile Gln His Ser Gly Leu Ala Asn Gly Ile Phe Met
500      505      510
Lys Phe Leu Lys Asp Arg Leu Leu Glu Asp Lys Lys Ile Thr Val Leu
515      520      525
Leu Asp Glu Val Ala Glu Asp Met Gly Lys Cys His Leu Thr Lys Gly
530      535      540
Lys Gln Ala Leu Glu Ile Arg Ser Ser Leu Ser Glu Lys Arg Ala Leu
545      550      555      560
Thr Asp Pro Ile Gln Gly Thr Glu Tyr Ser Ala Glu Ser Leu Val Arg
565      570      575
Asn Leu Gln Trp Ala Lys Ala His Glu Leu Pro Glu Ser Met Cys Leu
580      585      590
Lys Phe Asp Cys Gly Val Gln Ile Gln Leu Gly Phe Ala Ala Glu Phe

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595 600 605
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
 610 615 620
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
 625 630 635 640
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
 645 650 655
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
 660 665 670
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
 675 680 685
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
 690 695 700
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
 705 710 715 720
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
 725 730 735
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
 740 745 750
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
 755 760 765
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
 770 775 780
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
 785 790 795 800
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
 805 810 815
 Asp Arg Leu Arg Ile Ser Glu Lys
 820

<210> 1581
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1581
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 120
 ggatacccg atgtgccccg ttcgaaggag aagttcgagt cccactaccc ggggtgacttc
 180
 atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc
 240
 ctggtgtttg acgagtcctc gtaccgcaat gtgtgtgtc tgggccacat cttggccgag
 300
 gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gtcctggat
 360
 tcccacggtg ccgacgcgt gcgttggttc atggcgccg acggtcccc atggagtga
 420
 cgacgc
 426

<210> 1582

<211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1582
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
 1 5 10 15
 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
 20 25 30
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
 35 40 45
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50 55 60
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr
 65 70 75 80
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
 85 90 95
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
 100 105 110
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
 115 120 125
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
 130 135 140

<210> 1583
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 1583
 nnacgcgtga aggggttatgg agatgggttca gggagtaagg aagggtttcag ggatgggttta
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 ggggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttggggggct
 120
 cctaaggga taggttcagg gagtaaggca ggtttcagg atggtttagg gagttctggg
 180
 gaaatgggggt caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
 240
 ggttcaggca gttacacaga ttacaggaat ggtttaggca gttctggaaa aatcagttca
 300
 ggggatgagg caggttataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
 360
 gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgatcatg gaatgaggca
 420
 gggtctagga aaggctttgg gggaactagt
 450

<210> 1584
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 1584
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

1	5	10	15
Arg Asp Gly	Leu Gly Gly Ser Glu	Glu Met Gly Ser Met	Asp Glu Ala
	20	25	30
Gly Tyr Arg	Lys Asp Leu Gly Ala	Pro Lys Gly Ile Gly	Ser Gly Ser
	35	40	45
Lys Ala Gly	Phe Arg Asp Gly Leu	Gly Ser Ser Gly Glu	Met Gly Ser
	50	55	60
Met Asp Glu	Ala Asp Tyr Arg Lys	Asp Leu Gly Ala	Pro Glu Glu Met
65	70	75	80
Gly Ser Gly	Ser Tyr Thr Asp Tyr	Arg Asn Gly Leu	Gly Ser Ser Gly
	85	90	95
Lys Ile Ser	Ser Gly Asp Glu Ala	Gly Tyr Lys Asn	Val Leu Gly Gly
	100	105	110
Ser Gly Arg	Asn Pro Leu Gly Ser	Glu Ala Gly Ser	Arg Gly Ser Leu
	115	120	125
Glu Asp Ser	Gly Tyr Ile Leu Ser	Trp Asn Glu Ala	Gly Ser Arg Gln
	130	135	140
Gly Phe Gly	Gly Thr Ser		
145	150		

<210> 1585
 <211> 596
 <212> DNA
 <213> Homo sapiens

<400> 1585
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 tctaatecga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
 120
 ggcagctgca gggcaagctg gggaggaagc gcagggtggt gcacagggtg catcataatg
 180
 gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttaa caaacactgg
 240
 tttagaaata cgctttttta ggaacgacag agaaataaag attcaccata caacttcagt
 300
 aaccttctta taacggtttt agaagatatc agaattgatc cacagcccac ctcttttagaa
 360
 cattacaaat ctgatgcac attcagtaaa aggtcttcta gaacgagatt tactgactac
 420
 cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata
 480
 gaacaactct ccactgttct caatctgeet acccggtta ttgttgatg gttccagaat
 540
 gtcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt
 596

<210> 1586
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1586
 Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

1           5           10           15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
20           25           30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
35           40           45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
50           55           60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
65           70           75           80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
85           90           95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
100          105          110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
115          120          125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
130          135

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<210> 1587
 <211> 501
 <212> DNA
 <213> Homo sapiens

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<400> 1587
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120
tccacggagg gctcagcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tggtcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcgtgctcc tgacagctca gacccagac cgcaggtgct cccgacagct cagaccccag
300
accgcgggtg ctctgacag ctacagaccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcgtgctcc cgacagctca
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gacccagac cgcgggtgct cctgacagct cagaccccag accgcgggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

```

<210> 1588
 <211> 86
 <212> PRT
 <213> Homo sapiens

```

<400> 1588
Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
1           5           10           15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
20           25           30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

      35              40              45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
      50              55              60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65              70              75              80
Pro Asp Arg Gly Cys Ser
      85

```

<210> 1589
 <211> 407
 <212> DNA
 <213> Homo sapiens

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<400> 1589
aagcttgctg gggacaccct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
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tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
120
tgcctactcg ttgctgacca ccaagagggc gggcgtggac ggttcacgcg cagttggcag
180
gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgatcg tccgtcgcag
240
gactgggggt ggctgtcgat ggttgcgggg ctcgctgttg tcaaggtcac caaggaggtc
300
gggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
407

```

<210> 1590
 <211> 135
 <212> PRT
 <213> Homo sapiens

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<400> 1590
Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
1      5      10      15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
      20      25      30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
      35      40      45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
50      55      60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
65      70      75      80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
      85      90      95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
100      105      110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
115      120      125
Cys Gly Ile Leu Ser Glu Arg
130      135

```

<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
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 120
 cgcacattga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgtcgt ccctgcacag
 240
 aacgtccagc gagtctgac tttccagccg ctgcgcttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcgg ccccgagcagt ctggcccagc ctgtccagta ctcccttgac
 360
 tgtgggatcc ctggctgctc acgcccctga ggaccctcgt gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
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 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
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 atgagaaaatg agccattga aggcaaacctc tcaactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagacccgtg aatttgatgg tactgaagtt
240
ttaaagggag atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggta tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga
720
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaaag tcatgggtcca
960
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag
1020
tgctttctga aacaacaaag ccaaacttcc attgggtcagg taattcagga ggggtggggag
1080
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc
1140
tataagccta atctcataat gtatttcttt tttgaaactg atttgttttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagttagg acatcactgg
1320
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg
1380
tccattaaga aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt
1440
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
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1560
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
aaggcaaata aacttgggtac gtatttcata tctattttaa aaatgaaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1 5 10 15
 Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20 25 30
 Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35 40 45
 Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50 55 60
 Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65 70 75 80
 Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85 90 95
 Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
 100 105 110
 Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
 115 120 125
 Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
 130 135 140
 Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
 145 150 155 160
 Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
 165 170 175
 Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
 180 185 190
 Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
 195 200 205
 Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
 210 215 220
 Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
 225 230 235 240
 Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
 245 250 255
 Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
 260 265 270
 Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
 275 280 285
 Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
 290 295 300
 Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
 305 310 315 320
 Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
 325 330 335
 Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
 340 345 350
 Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
 355 360 365

<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

WO 00/58473

<400> 1595
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 gcatggcccg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg cccagccagg gagagcatct tcccgtggg accttccccg gggcgggtca
 180
 tcccttgagg atgtagggtg cagctgagat ggtggcggcc ccattcctgc tgttcgccag
 240
 cctgggctgg gggtagtagg atcacccttg ggctgatgag gagccccgggt cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctgcccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tcctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
 cagcttgagg agccagcatc aaggtcaggc ctacttgcc caagaaagag gagtgaggag
 540
 gcccactgga ggaacgcgt
 559

<210> 1596
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1596
 Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu
 1 5 10 15
 Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu
 20 25 30
 Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp
 35 40 45
 Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro
 50 55 60
 Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile
 65 70 75 80
 Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Gln Glu Trp Gly Arg His
 85 90 95
 His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu
 100 105 110
 Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys
 115 120 125
 Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro
 130 135 140
 Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp
 145 150 155 160
 Ala Cys Glu Arg Asp Arg
 165

<210> 1597
 <211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttgggacct tgaacgggta
60
ccgggtggtt ccgggtggtg ttcagcagct agcttggtt cctttcaggc cccgttggtt
120
ttgggcactg ataccggggg ctgatccgc caacctggag cggtgaccgg caccgtcggg
180
atcaagccga cctacgggtt gacctccga tacggcgta tcgctatggc ttcattcttg
240
gatactcctg ggccctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt
300
gccgggtcacg acgctatgga ccagaccacg attaatacgc ccaccccggc ggctcgttgag
360
gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
420
cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag
480
gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgctt acctgcttat
540
taccttatte agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
600
ggcttacgc
609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser Ser Thr Glu Thr Ser Ala Phe Gly Pro Thr His Asn Pro Trp Asp
1 5 10 15
Leu Glu Arg Val Pro Gly Gly Ser Gly Gly Ser Ala Ala Ser Leu
20 25 30
Ala Ser Phe Gln Ala Pro Leu Ala Leu Gly Thr Asp Thr Gly Gly Ser
35 40 45
Ile Arg Gln Pro Gly Ala Val Thr Gly Thr Val Gly Ile Lys Pro Thr
50 55 60
Tyr Gly Ser Thr Ser Arg Tyr Gly Val Ile Ala Met Ala Ser Ser Leu
65 70 75 80
Asp Thr Pro Gly Pro Cys Ala Arg Thr Val Leu Asp Ala Ala Leu Leu
85 90 95
His Gln Ala Ile Ala Gly His Asp Ala Met Asp Gln Thr Thr Ile Asn
100 105 110
Gln Pro Thr Pro Ala Val Val Glu Ala Ala Arg Gln Ala Asp Val Ser
115 120 125
Gly Val Arg Ile Gly Val Val Thr Glu Leu Ser Gly Gln Gly Tyr Asp
130 135 140
Pro Gln Val Glu Ala Arg Phe His Glu Ala Val Glu Met Leu Ile Glu
145 150 155 160
Ala Gly Ala Glu Val Val Glu Val Ser Cys Pro Asn Phe Asp Leu Ala

				165					170					175					
Leu	Pro	Ala	Tyr	Tyr	Leu	Ile	Gln	Pro	Ala	Glu	Val	Ser	Ser	Asn	Leu				
			180					185						190					
Ala	Arg	Tyr	Asp	Ala	Met	Arg	Tyr	Gly	Leu	Arg									
		195					200												

<210> 1599

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1599

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gcgtggccga cggctgctgt gtggtcagcg atctttatctt ttcttgatcg attcagaacc
60
cggcacctgc acgtgtgggt tctctgcttt tgttggggag cgtgctcgc gacctggatt
120
agcatgcacg tgaacacgtg gatggccggg atgctctcgg tgacaggtgg ggttgatcca
180
gcatcgggag ccgggtccggc agtgtattcg gctccctttg ttgaggaatc atgcaaggcg
240
cttgtgcttt tcgcgctggc catcggcatg gggcgacgga tgacctcggg agttcagacg
300
gtgagcatgg ccgggctctc ggcaattggg ttcgcctttg ttgagaacat tatgtactac
360
gcccgtgcag ataactacgc ccgtgtgacg gcttcgggtg gggaccccaa acaaggcggt
420
gatgaagttg gtgctgttgc ggggagtgta tgacctcgtt gggcatccgc tgttcaccag
480
catgacgggt atcgggtctg cccttgggct gaggtcacga agttga
526

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<210> 1600

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1600

Met	His	Val	Asn	Thr	Trp	Met	Ala	Gly	Met	Leu	Ser	Val	Thr	Gly	Gly				
1				5				10					15						
Val	Asp	Pro	Ala	Ser	Gly	Ala	Gly	Pro	Ala	Val	Tyr	Ser	Ala	Pro	Phe				
		20					25					30							
Val	Glu	Glu	Ser	Cys	Lys	Ala	Leu	Val	Leu	Phe	Ala	Leu	Ala	Ile	Gly				
	35					40					45								
Met	Gly	Arg	Arg	Met	Thr	Ser	Val	Val	Gln	Thr	Val	Ser	Met	Ala	Gly				
	50			55					60										
Leu	Ser	Ala	Ile	Gly	Phe	Ala	Phe	Val	Glu	Asn	Ile	Met	Tyr	Tyr	Ala				
65			70					75						80					
Arg	Ala	Asp	Asn	Tyr	Ala	Arg	Val	Thr	Ala	Ser	Gly	Gly	Asp	Pro	Lys				
		85					90						95						
Gln	Gly	Val	Asp	Glu	Val	Gly	Ala	Val	Ala	Gly	Ser	Val	Cys	Leu	Val				
	100					105					110								
Trp	Ala	Ser	Ala	Val	His	Gln	His	Asp	Gly	Tyr	Arg	Ser	Gly	Pro	Trp				
	115				120						125								
Ala	Glu	Val	Thr	Lys	Leu														

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

gcccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
60
atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
120
ttcttcccgg gcgccaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
180
ctcaagctca tggctggtct cgataagccc aataacggcg atgccaaactt ggctaaaggc
240
gccaccgtcg gaatcttgct tcaggagccc ccgctcaccg aggacaaaac tgttcgagag
300
aacgtcgaag aggccgtcgg cgacatcaaa gccaaagctgg cacggttcga ggaagtctcc
360
gccgagatgg ccaaccctga cgccgacttt gacgccctga tggcggagat ggggtgagctg
420
cagaccgagc tcgataacgc caacgcg
447

<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

Met	Ala	Glu	Phe	Ile	Tyr	Thr	Met	His	Asn	Val	Arg	Lys	Ala	Val	Gly
1				5					10					15	
Asp	Lys	Val	Ile	Leu	Asp	Asn	Val	Thr	Leu	Ser	Phe	Phe	Pro	Gly	Ala
		20						25					30		
Lys	Ile	Gly	Val	Val	Gly	Pro	Asn	Gly	Ala	Gly	Lys	Ser	Thr	Met	Leu
		35					40					45			
Lys	Leu	Met	Ala	Gly	Leu	Asp	Lys	Pro	Asn	Asn	Gly	Asp	Ala	Asn	Leu
		50				55					60				
Ala	Lys	Gly	Ala	Thr	Val	Gly	Ile	Leu	Leu	Gln	Glu	Pro	Pro	Leu	Thr
65					70					75				80	
Glu	Asp	Lys	Thr	Val	Arg	Glu	Asn	Val	Glu	Glu	Ala	Val	Gly	Asp	Ile
			85					90						95	
Lys	Ala	Lys	Leu	Ala	Arg	Phe	Glu	Glu	Val	Ser	Ala	Glu	Met	Ala	Asn
			100					105					110		
Pro	Asp	Ala	Asp	Phe	Asp	Ala	Leu	Met	Ala	Glu	Met	Gly	Glu	Leu	Gln
		115					120						125		
Thr	Glu	Leu	Asp	Asn	Ala	Asn	Ala								
		130				135									

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
 60
 gaaatccttg aggcgtacct caacgaggtc ttcgctcggtc aggatggcca gcgcgccgtg
 120
 cacgggtttg gcttgggccag tcagttcttc tttggccagc ctttgtccga gctgaagttg
 180
 catcaagtcg cgttggttggc cgggatggtc aaggggcccg cctattacaa cccgcggcgc
 240
 aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggt
 300
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
 360
 ggcaagctgg cggacagctc cttcccaggc tttatcgacc tggtaaacy cagtttcgac
 420
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
 480
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
 540

<210> 1604

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1			5						10				15		
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25				30			
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55					60				
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85						90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105					110		
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
	115						120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
	130					135					140				
Asp	Glu	Asp	Leu	Thr	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp	
145					150				155					160	
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
			165						170					175	
Arg	Leu	Thr	Gly												
			180												

<210> 1605

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

acgcgttggt gcggtcgggc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcgggatc tgcactggga tattgcggcc catcgctgt gaccacacat
120
cgcagcgtg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
240
ccagcgtac ggcgactgcc atgatgaccg aaaggacgcg acccctaata gatgcagtca
300
tctttctcct tcacaaagta ttgggtaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgttaac atcccgcgcg ggaagctaac tagcaagcag tctaatagcac tcccgggcca
420
aatgttg
427

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

Met	Thr	Ala	Ser	Ile	Arg	Gly	Arg	Val	Leu	Ser	Val	Ile	Met	Ala	Val
1				5					10					15	
Ala	Val	Ala	Leu	Gly	Leu	Ala	Val	Val	Ala	Gly	Gly	Thr	Gln	Gln	Ala
			20					25					30		
His	Ala	Ala	His	Arg	Asp	Phe	Leu	Arg	Ala	Asp	Ser	Thr	Gly	Thr	Cys
		35				40						45			
Glu	Trp	Asp	Gln	Val	Gly	Trp	Trp	Val	Gln	Arg	Cys	Asp	Val	Trp	Ser
	50					55					60				
Gln	Ala	Met	Gly	Arg	Asn	Ile	Pro	Val	Gln	Ile	Pro	Pro	Ala	Lys	Asn
65					70				75					80	
Gly	Gly	Asn	Ala	Gly	Leu	Tyr	Leu	Leu	Asp	Gly	Leu	Arg	Ala	Thr	Asp
			85					90						95	
Arg	Thr	Asn	Ala												
			100												

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtcaa
120
cggatgggac tgatcccgta cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

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<210> 1608
<211> 56
<212> PRT
<213> Homo sapiens
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<210> 1609
<211> 505
<212> DNA
<213> Homo sapiens
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<210> 1610
<211> 129
<212> PRT
<213> Homo sapiens
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<400> 1610
 Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1 5 10 15
 Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
 20 25 30
 Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
 35 40 45
 Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
 50 55 60
 Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
 65 70 75 80
 Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
 85 90 95
 Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
 100 105 110
 Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
 115 120 125
 Met

<210> 1611
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 1611
 acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
 60
 aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtatttaggt
 120
 agaatgttcg atggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
 180
 aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
 240
 ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
 300
 tacgttggag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctatgtta
 360
 ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
 420
 attgcaaaag aaaaagcgag tcaatatggt ggttcagtca tgattacgga taatattgca
 480
 gaagcagttg aaaatacaga tgctatatat acagatgttt gggatatcgac gg
 532

<210> 1612
 <211> 177
 <212> PRT
 <213> Homo sapiens

<400> 1612
 Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1 5 10 15
 Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

WO 00/58473

20 25 30
 Glu Asp Thr Ala Lys Val Leu Gly Arg Met Phe Asp Gly Ile Glu Phe
 35 40 45
 Arg Gly Phe Ser Gln Gln Ala Gly Glu Asp Leu Ala Lys Phe Ser Gly
 50 55 60
 Val Pro Gly Trp Asn Gly Leu Thr Asp Asp Trp His Pro Thr Gln Met
 65 70 75 80
 Leu Ala Asp Phe Met Thr Ile Lys Glu Asn Phe Gly Tyr Leu Glu Gly
 85 90 95
 Ile Asn Leu Thr Tyr Val Gly Asp Gly Arg Asn Asn Ile Ala His Ser
 100 105 110
 Leu Met Val Ala Gly Ala Met Leu Gly Val Asn Val Arg Ile Cys Thr
 115 120 125
 Pro Lys Ser Leu Asn Pro Lys Glu Ala Tyr Val Asp Ile Ala Lys Glu
 130 135 140
 Lys Ala Ser Gln Tyr Gly Gly Ser Val Met Ile Thr Asp Asn Ile Ala
 145 150 155 160
 Glu Ala Val Glu Asn Thr Asp Ala Ile Tyr Thr Asp Val Trp Val Ser
 165 170 175
 Thr

<210> 1613
 <211> 584
 <212> DNA
 <213> Homo sapiens

<400> 1613
 nnacgcgttc agccgagaaa tatgctgctt ttgcctgcc acctcacaaa tgctacggca
 60
 cagggcgctcc aggtttttgcg cctcctggta cgttgctaca cacttgctca cctcccagcg
 120
 gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
 180
 tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
 240
 tctgccgcat cctgtgaagc gttcagggag gtcgacatgg ataagtgcg tatgcctggc
 300
 acggtaaaagt gtcgcgggct tgtagatgcg tgtgaacgtt ttcgtgactt gaagaggtcg
 360
 aagctgatgt gttcgcgtga gtcgatgca gcgcgctgcg ttgcgtgcct tgtgggtcgat
 420
 cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcc
 480
 gtgggagagg cgatgagttc ctcatattgcg tctttctcga ggtcttggtc catgtccata
 540
 aacataccaa agctggatgg gtcatacgac ggccgagcat gcat
 584

<210> 1614
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 1614
 Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1 5 10 15
 Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
 20 25 30
 Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
 35 40 45
 Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
 50 55 60
 Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
 65 70 75 80
 Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
 85 90 95
 Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
 100 105 110
 Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
 115 120 125
 Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
 130 135 140
 Pro Ile Glu Cys Gly Val Val Phe Ser
 145 150

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615
 gccggcttgc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
 60
 tcggtgcttg tcagtgtctgg tgtcatcatt tccctgcttg gggctctact ggcctggatc
 120
 ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
 180
 ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
 240
 cagatatgcc ttgtcatgac ggtgttgtgg gacgggtgctt acttggcgat ggcgaccctg
 300
 gctgccgccc tcatcctggt gccgtacctg ctgtcagccg cattcgccct gaagatgggtg
 360
 atc
 363

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616
 Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1 5 10 15
 Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
 20 25 30
 Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln


```

      35              40              45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
      50              55              60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
65              70              75              80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
      85              90              95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
      100              105              110
Ala Ala Phe Ala Leu Lys Met Val Ile
      115              120

```

<210> 1617
 <211> 447
 <212> DNA
 <213> Homo sapiens

```

<400> 1617
accggtgact acctgtggga gaagaagggc atcgttccca tcctcaagat tgataagggc
60
ctggctgacg agggctgcc a cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg cgcgcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaacccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaag gctgcacaac ctcatccgcg agcacatcga ctctctgccg
360
ctcgacgcc a gatcatgtt gaagctgacg atcccagatt ccgaagacct gtatgccgac
420
ctcattgcgg atccgaaggt cctacgc
447

```

<210> 1618
 <211> 149
 <212> PRT
 <213> Homo sapiens

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<400> 1618
Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1      5      10      15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
20     25     30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
35     40     45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
50     55     60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
65     70     75     80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
85     90     95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

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100 105 110
 Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
 115 120 125
 Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
 130 135 140
 Pro Lys Val Leu Arg
 145

<210> 1619
 <211> 355
 <212> DNA
 <213> Homo sapiens

<400> 1619
 nnggtaccga aaccctgtgc gctaccgcat aaaatcaaag gaactagtat gcataacgta
 60
 acaacaaatg gtgcctccat tcccgccctt ggccttggca ctttccgtat gcccggcgaa
 120
 gatgtgcttc gcacgtccc ttacgcgctc aaggctgggt ttcgccatgt cgataccgag
 180
 cagatttatg gcaatgaagt cgaggctcggg gaagcaattg cgacttccgg cgttcagcgt
 240
 ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcacc
 300
 gcacgtgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
 355

<210> 1620
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1620
 Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
 1 5 10 15
 Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
 20 25 30
 Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
 35 40 45
 Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
 50 55 60
 Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
 65 70 75 80
 Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
 85 90 95
 Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
 100 105 110
 Asp Tyr Val Asp Leu Leu
 115

<210> 1621
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1621

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 60
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<210> 1622

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1622

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		20						25					30		
Gln	Arg	His	Gly	Ala	Gly	Pro	Arg	Gly	Gly	Gly	Arg	Gln	Arg	Ala	Gly
		35					40					45			
Pro	Arg	Ser	His	Gly	Gln	Gly	Arg	Arg	Arg	Phe	Ala	Ala	Gly	Ala	Gly
	50					55					60				
His	Cys	Ala	Arg	Tyr	Glu	Gly	Arg	Arg	Gly	His	Lys	Ala	Arg	Pro	Ala
65				70					75					80	
His	Leu	Pro	Ala	Ala	Leu	Leu	Pro	Ala	Ala	Ala	Leu	Gly	Gly	Ala	Arg
			85					90						95	
Arg	Pro	Leu	His	Arg	Leu	Pro	Ala	Ala	Pro	Phe	Gly	Leu	Arg	Arg	Ala
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<210> 1623

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1623

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 aacttttccg cagtttcaga ggagagtctg caagtgagag ctgcagtgc tgtgccttgt
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<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
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1304

<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
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 1 5 10 15
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 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
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<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
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20	25	30	
Val Gln Thr Arg Phe Pro Pro Glu	Pro Asn Gly Tyr Leu His Ile Gly		
35	40	45	
His Ala Lys Ala Ile Val Thr Asp	Phe Gly Val Ala Glu Asp Phe Gly		
50	55	60	
Gly Thr Cys Asn Leu Arg Leu Asp	Asp Thr Asn Pro Gly Thr Glu Glu		
65	70	75	80
Thr Glu Tyr Val Glu Ser Ile Val	Ala Asp Ile Glu Trp Leu Gly Tyr		
85	90	95	
Ser Pro Ala His Val Val His Ala			
100			

<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75					80
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
				85					90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105						110	
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
		115					120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145					150					155					160
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
				165					170					175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
		180						185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200					205			
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225					230					235					240
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
				245					250					255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
				260				265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290 295 300
 Trp Leu Val Asn Arg Leu Pro Gly Leu Lys Asp Leu Leu Leu Ala Gly
 305 310 315 320
 Cys Ser Trp Ser Ala Val Ser Ala Leu Ser Thr Ser Ser Cys Pro Leu
 325 330 335
 Leu Arg Thr Leu Asp Leu Arg Trp Ala Val Gly Ile Lys Asp Pro Gln
 340 345 350
 Ile Arg Asp Leu Leu Thr Pro Pro Ala Asp Lys Pro Gly Gln Asp Asn
 355 360 365
 Arg Ser Lys Leu Arg Asn Met Thr Asp Phe Arg Leu Ala Gly Leu Asp
 370 375 380
 Ile Thr Asp Ala Thr Leu Arg Leu Ile Ile Arg His Met Pro Leu Leu
 385 390 395 400
 Ser Arg Leu Asp Leu Ser His Cys Ser His Leu Thr Asp Gln Ser Ser
 405 410 415
 Asn Leu Leu Thr Ala Val Gly Ser Ser Thr Arg Tyr Ser Leu Thr Glu
 420 425 430
 Leu Asn Met Ala Gly Cys Asn Lys Leu Thr Asp Gln Thr Leu Ile Tyr
 435 440 445
 Leu Arg Arg Ile Ala Asn Val Thr Leu Ile Asp Leu Arg Gly Cys Lys
 450 455 460
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 465 470 475 480
 Asn Ser Leu Tyr Cys Leu Ser Asp Glu Lys Leu Ile Gln Lys Ile Ser
 485 490 495

<210> 1631
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1631
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 ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac
 180
 caaccaagtt cagcaagctg tgggcgcctt gggtttaccg ccactagaag atgaaaacgc
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 cttcgatcaa gttccagatg tgctctaga
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<210> 1632
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1632
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 Lys Thr Leu Gln Thr Leu Phe His Val Asp Ser Arg Asp Glu Leu Val

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Glu Leu Leu Gly Phe Ser Lys Asp Asp Ile Thr Asn Gln Val Gln Gln
      35      40      45
Ala Val Gly Ala Leu Gly Leu Pro Pro Leu Glu Asp Glu Asn Ala Gln
      50      55      60
Gly Glu Asp Pro Ala Ser Gln Val Pro Pro Val Thr Asp Glu Asp Pro
65      70      75      80
Thr Ala Phe Phe Asp Gln Val Pro Asp Val Pro Leu
      85      90

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<210> 1633
 <211> 259
 <212> DNA
 <213> Homo sapiens

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<400> 1633
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120
ggattgttag gtggatttac gacttattcc gccctcacgg tggaaaccgg ccaacgtgtg
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259

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<210> 1634
 <211> 86
 <212> PRT
 <213> Homo sapiens

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<400> 1634
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Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Pro Gly Val Arg Arg
      20      25      30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
      35      40      45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
      50      55      60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
65      70      75      80
Leu Leu Ala Trp Val Met
      85

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<210> 1635
 <211> 792
 <212> DNA
 <213> Homo sapiens

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<400> 1635
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<210> 1636
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 1636
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 Ser Lys Ala Ile Val Trp Asp Glu Tyr Leu Thr Gly Pro Phe Gly Leu
 35 40 45
 Ile Ala Gln Tyr Ser Leu Leu Lys Glu His Glu Val Glu Lys Met Phe
 50 55 60
 Thr Leu Lys Gly Asn Arg Leu Pro Ala Ala Asp Val Lys Asn Ile Ile
 65 70 75 80
 Phe Phe Val Arg Pro Arg Leu Glu Leu Met Asp Ile Ile Ala Glu Asn
 85 90 95
 Val Leu Ser Glu Asp Arg Arg Gly Pro Thr Arg Asp Phe His Ile Leu
 100 105 110
 Phe Val Pro Arg Arg Ser Leu Leu Cys Glu Gln Arg Leu Lys Asp Leu
 115 120 125
 Gly Val Leu Gly Ser Phe Ile His Arg Glu Glu Tyr Ser Leu Asp Leu
 130 135 140
 Ile Pro Phe Asp Gly Asp Leu Leu Ser Met Glu Ser Glu Gly Ala Phe
 145 150 155 160
 Lys Glu Cys Tyr Leu Glu Gly Asp Gln Thr Ser Leu Tyr His Ala Ala

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<210> 1637
<211> 357
<212> DNA
<213> Homo sapiens
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<210> 1638
<211> 119
<212> PRT
<213> Homo sapiens
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<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

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 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
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 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttcacc
 180
 ttcattgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggcta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacc taactacctc agaatgggac
 360
 gttatttgga aaaaag
 376

<210> 1642
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1642
 Met Asp Gly Leu Leu Glu Trp Glu Arg Leu Gly Arg Ser Cys Val Gly
 1 5 10 15
 Trp Val Thr Pro Asn Leu Lys Asn Pro Leu Arg His Met Trp Leu Pro
 20 25 30
 Ser Ser Thr Phe Ile Ala Ser Phe Arg Leu Asp Ala Gly Lys Gly Gly
 35 40 45
 Leu Gly Gly Gln Arg Glu Leu Leu Phe Ile Gln Glu Leu Cys Tyr Thr
 50 55 60
 Ser His Phe Thr Cys Ala Thr Cys Ser Gly Leu Asn Cys Ala Ser Pro
 65 70 75 80
 His Ser Tyr Val Glu Val Leu Thr Leu Thr Ser Glu Trp Asp Val
 85 90 95
 Ile Trp Lys Lys
 100

<210> 1643
 <211> 494
 <212> DNA
 <213> Homo sapiens

<400> 1643
 aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc
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 gagtgtctga gagcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg
 120
 ggccagaatc cccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct
 180
 ctgcttggat ccaggatata agaaaggagg ggcacacact gtgggggaac tctggggctc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagcccatg ctcacagccc tataagtgca cgatggcacc ctatatcatt taagcggggc
 360
 tgtgcctcct gaggctttag ggacaccaga atgagcccc ctcggcgagg tctggctctg
 420

gggtgtgtgga gatgccacct gggacgggaa ccccaggtgc atggagcccc actgcagaca
 480
 ccatcccccg tgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
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 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcggatagcc cagctaattgc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcggttg aagcagggtg ccagcatcct gatccgggct
 240
 ttgggcacca atcctaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 gggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

		20						25					30				
Asn	Phe	Asn	Val	Arg	Cys	Lys	Glu	Thr	Leu	Asp	Asp	Val	Leu	His	Arg		
		35					40					45					
Ile	Ala	Gln	Leu	Met	Gln	Asp	Asp	Asp	Cys	Pro	Leu	Gln	Ser	Leu	Ser		
	50				55						60						
Val	Ala	Glu	Ser	Arg	Leu	Lys	Gln	Gly	Ala	Ser	Ile	Leu	Ile	Arg	Ala		
65					70					75				80			
Leu	Gly	Thr	Asn	Pro	Lys	Leu	Thr	Ala	Leu	Asp	Ile	Ser	Gly	Asn	Ala		
			85					90					95				
Ile	Gly	Asp	Ala	Gly	Ala	Lys	Met	Leu	Ala	Lys	Ala	Leu	Arg				
		100						105					110				

<210> 1647

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1647

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aggccgctcg gtgatccgcg gcggcgccag cggcgcttcc tgctaggacc ggccggggcc
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gtaccggagg ctccggctcc accgaccctc ctcccacccc ctcccactca ccctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggcccgc ggtgtgggct aagctggtgg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tcccacatcg ctggcagcgc tgtgtgcgag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaaccg ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtgtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

```

<210> 1648

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1648

Met	Asn	Gly	Gly	Asn	Glu	Ser	Ser	Gly	Ala	Asp	Arg	Ala	Gly	Gly	Pro		
1				5				10					15				
Val	Ala	Thr	Ser	Val	Pro	Ile	Gly	Trp	Gln	Arg	Cys	Val	Arg	Glu	Gly		
			20				25					30					
Ala	Val	Leu	Tyr	Ile	Ser	Pro	Ser	Gly	Thr	Glu	Leu	Ser	Ser	Leu	Glu		
	35				40			45									
Gln	Thr	Arg	Ser	Tyr	Leu	Leu	Ser	Asp	Gly	Thr	Cys	Lys	Cys	Gly	Leu		
	50				55			60									
Glu	Cys	Pro	Leu	Asn	Val	Pro	Lys	Val	Phe	Asn	Phe	Asp	Pro	Leu	Ala		
65				70				75						80			
Pro	Val	Thr	Pro														

<210> 1649
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1649
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 accaactcac gggtgtcgcg catcttctcc aacaaggatga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcac gatcagatcg ttctgtatct ccgccacgcc
 180
 gcccaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
 240
 aaatcgtccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggctcgc cggctcttca gtcgccccctg gggttgttca acgccactga agacggcgcg
 360
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgcctgg
 420
 gcgaccaagc gcctggccga a
 441

<210> 1650
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1650
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
 1 5 10 15
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
 20 25 30
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
 35 40 45
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
 50 55 60
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
 65 70 75 80
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
 85 90 95
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
 100 105 110
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
 115 120 125
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
 130 135 140
 Leu Ala Glu
 145

<210> 1651
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

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nccgcggatc cctccggcat cctgggttatc gtcctctcga aggaatccgg agcccgactg
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cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
240
catggctcgt ggccccgcgga gatgcgcccc gcgtggaatn natgtgggct ttcgcggcag
300
ctgcgcgatt tccttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

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<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

```

Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
1      5      10      15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
20     25     30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
35     40     45
Leu Arg Thr Ala Ala Glu Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
50     55     60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65     70     75     80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
85     90     95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
100    105    110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
115    120    125
Met Trp Ser Ala Ala Gly Glu Phe
130    135

```

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

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ccagcctctc tccgaccgcg tcctttcttcc ggccatacgg cacccaatgt cgcgtcacca
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tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
 180
 ggcaattgacg tccagagcag cctgcttatt gctggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cgggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccggtgtc gcacaggtgg cacaaagcag cacacccgtg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1654
 Pro Ala Ser Leu Arg Pro Arg Pro Ser Ser Gly His Thr Ala Pro Asn
 1 5 10 15
 Val Ala Ser Pro Ser Pro Ala His Met Ala Ile Ala Pro Pro Asp Glu
 20 25 30
 Leu Ser Asp Lys Ile Arg Cys Ile Leu Arg Thr Leu Glu Pro Gly Asp
 35 40 45
 Ser Val Lys Glu Ile Leu Asn Thr Ser Arg Val Val Gly Ile Asp Val
 50 55 60
 Gln Ser Ser Leu Leu Ile Ala Gly Ala Gln His Leu Tyr Leu Leu Asp
 65 70 75 80
 Asp Tyr Phe Gln Arg Pro Asn Gly Glu Ile Val Asn Val Trp Glu Ala
 85 90 95
 Pro Pro His Glu Arg Asp Ala Leu Ile Val Ala Ala Gly Val Ala Gln
 100 105 110
 Val Ala Gln Ser Ser Thr Pro Val Gln Ile Trp Arg Trp Glu Gln Leu
 115 120 125
 Arg Leu Cys Leu
 130

<210> 1655
 <211> 1115
 <212> DNA
 <213> Homo sapiens

<400> 1655
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 60
 ctggagggcg agcgtggcaa gagggccccc cgggagggcg agcctgcagc cccggcgtcc
 120
 ggagttcttg ataagctttt cggaagcgg ctccctgcagg ctggtcgcta cctggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatccgcgt gggcattccc
 300
 gagctcatcg tgcaagtccg ccaccaccgc cacacgcgtg cctacgcctt ctttgtcacc
 360

gccacgtatg agagcctact ccgaggggcc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcgggggcac ccgcggcttc tcttgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcagggtgtt ccctgtccac
 660
 gacgagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgcctggctg
 780
 ggcttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggctg atcagacaag ccgggatgtt tcttgcgtgg tctttgccct cttcaacgtg
 900
 atctggtcga cgctgttcct ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcagggtc
 1020
 gtgcgacgta tcatcccat cactcgggcc gaggagtctt actaccgcc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
	50				55						60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70				75					80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
			85					90					95		
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120				125				
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
	130					135					140				
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145					150				155					160	
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

165 170 175
 Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
 180 185 190
 Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
 195 200 205
 Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
 210 215 220
 Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
 225 230 235 240
 Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
 245 250 255
 Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
 260 265 270
 Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
 275 280 285
 Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
 290 295

<210> 1657
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1657
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 gcacggagac gcggcgctcag cacggacagc acgcagtctg tgagcctctg caggcagttc
 120
 ttggagcccg cgggcttccc gcgccgettc agggggcggg cggcagctcg ggccggtact
 180
 tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
 240
 ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtagcctc
 300
 gcgtggacat ccgcccctgc tagcatcagg gct
 333

<210> 1658
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 1658
 Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
 1 5 10 15
 Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
 20 25 30
 Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
 35 40 45
 Glu Val Pro Ala Arg Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
 50 55 60
 Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
 65 70 75 80
 Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

85 90 95
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
 100 105

<210> 1659
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 1659
 nnaagcttat ttgttattac taatattttc cgtgaccaga tgggcccgtta tggtgagatt
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 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
 120
 cttaatggag acagtcact tttctacaag ccagctattc caaatcctgt acagtatttt
 180
 ggttttgact tggagaaagg cccagcccaa ctggctcact ataataccga aggaattctc
 240
 tgtcccgact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttgggccc
 300
 tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg
 360
 gttgagttaa ccaacaatcg cn
 382

<210> 1660
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1660
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
 1 5 10 15
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
 20 25 30
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
 35 40 45
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
 50 55 60
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
 65 70 75 80
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
 85 90 95
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
 100 105 110
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
 115 120 125

<210> 1661
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 1661

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gctgcgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccggtcc
120
gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc
180
tgagcacctg ctctcatca tcagggttca ggaccttgca ctgccgcagg taaggtgtga
240
tgcgtgaggg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc
300
actcgtcacc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc
360
agtgtgaga gcatgcccgc ctctgcccc caccggggcc cagctccac tccttctcag
420
acgtggggcc agggctctcg tcagggcacc gagggggatc agcccaggcg catccaggag
480
aggtgcccag ctccgtgtcc catccacgc ttgatcgctg catg
524

<210> 1662
<211> 174
<212> PRT
<213> Homo sapiens

<400> 1662
Met Gln Arg Ser Ser Val Gly Trp Asp Thr Glu Leu Gly Thr Ser Pro
1 5 10 15
Gly Cys Ala Trp Ala Asp Pro Pro Arg Cys Pro Asp Glu Ser Pro Gly
20 25 30
Pro Ala Ser Glu Lys Glu Trp Glu Leu Gly Pro Gly Gly Arg Ser
35 40 45
Arg His Arg Ser Gln His Cys Pro Thr Leu Pro Ser Leu Pro Ala Glu
50 55 60
Ala Met Ser Asp Tyr Glu Asn Asp Asp Glu Cys Trp Asn Val Leu Glu
65 70 75 80
Gly Phe Arg Val Thr Leu Thr Ser Val Ile Asp Pro Ser Arg Ile Thr
85 90 95
Pro Tyr Leu Arg Gln Cys Lys Val Leu Asn Pro Asp Asp Glu Glu Gln
100 105 110
Val Leu Ser Asp Pro Asn Leu Val Ile Arg Lys Arg Lys Val Gly Val
115 120 125
Leu Leu Asp Ile Leu Gln Arg Thr Gly His Lys Gly Tyr Val Ala Phe
130 135 140
Leu Glu Ser Leu Glu Leu Tyr Tyr Pro Gln Leu Tyr Lys Lys Val Thr
145 150 155 160
Gly Lys Glu Pro Ala Arg Val Phe Ser Met Ile Ile Asp Ala
165 170

<210> 1663
<211> 321
<212> DNA
<213> Homo sapiens

<400> 1663

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 tccccgaaccc aagacgacga ggctcggaca cgcgcttcta tctcgaccct tcaagacgag
 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcagggtc attggagaaa acggttaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
			20					25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35				40					45				
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50				55						60				
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70					75					80	
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90						95	
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcccgaacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctggt gatttggtgt tgctcgacgt caaatcggga
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgatttttgg
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggt tcgttggtgg ccccgatac
 360
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
tccgctgaga ccagcgttgg tgacttccca ggtgagactg tccgcaccat ggccaagatc
60
gttgagtcta ctgaggcccg tggttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgtgg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcctggggtc
300
tggggcgctc acgccgtcgt taccgccgtg tttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
          20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
          35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
          50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
          85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
          100          105          110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
          115          120

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<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

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ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaactcc acccccttct caaacgagtt attcctagct ccgccccag tccttgctc
120
tccagcctt ggtggttaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaaca gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgcctttc cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtggc ctggaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tacttttgga tacgagtggc ctccacttag cttcgttaag
900

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attagaaatt tccatgaaac acttaccac atataaattc tgtgtaaagc tttatTTTTT
 960
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taaggtttaa catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcatcttcca ttgtgacaac ccttctcccc
 1140
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtgggtt gggtgactac atttgactac caccactgaa ggcggcggac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcca
 1320
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcca cagaaccatc ggcagctgcc
 1380
 ttctgaaggc acctcggtct ggcattcgga aaaccacccc atcttgccag agtcccttgg
 1440
 tccttgggta gcaaaagccg tatgcgatct aaatcaagct ttcaatcatg a
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1				5					10					15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
		20						25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
	35					40					45				
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50				55					60					
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70				75						80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
			85					90					95		
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
		100					105						110		
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
	115					120						125			
Cys	Ser	Val	Leu												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

gcgcgccggg gcgggaggac gccagtcgtc ttcccgcccc tcaccacgac acgaccatta
 60

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
 120
 gcatcccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgtcg
 180
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttcct catgaagacg
 240
 gcagccccga cgttgttggc taacaccgat aactttttca cgtccccggc ttggacaacg
 300
 gatcagaacc cgccggcctt tggatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag
 420
 ctcgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5						10					15	
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
		20						25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50					55					60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65					70					75				80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
				85					90					95	
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
			100					105					110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115				120						125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130					135						140			

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgct tgccagggcc tctgtgtttt gatatactct
 60
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctcccagc gtctttttcca tgagccaaag gcctggctct ggaggggggt gccctgcagc
 180
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactggttt t
 401

<210> 1674
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1674
 Met Ala Leu Tyr Phe Phe Ile His Lys Trp Arg Ile Cys Ile Leu Phe
 1 5 10 15
 Ser Gln Ile Leu Pro Ser Pro Cys Cys Ile Leu Leu Leu Pro Leu Pro
 20 25 30
 Ser Thr Val Glu Val Pro Ala Gly Pro Pro Pro Ala Met Asn Ser Pro
 35 40 45
 Gly Arg Arg Pro Ala Glu Leu Gln Gly Thr Pro Leu Gln Asp Gln Ala
 50 55 60
 Phe Gly Ser Trp Lys Arg Arg Trp Glu Pro Gly Val Thr Glu Gln Thr
 65 70 75 80
 Gly Leu Cys Arg Ala Phe Ile Ser Ser Phe Thr Ala Arg Ser Glu Tyr
 85 90 95
 Ile Lys Thr Gln Arg Pro Trp Gln Thr Pro Gln Arg Leu Glu Cys Ala
 100 105 110
 Arg

<210> 1675
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1675
 gccggcgcac ccacctggga cgtggtgaaa tcggcaaaac tcacctcttt agctacctgc
 60
 gcgccaaccg cacgggcagc ctcccacacg ccctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggt aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattccac cacagtcctt cgcactccac
 240
 ccgcacacgc cctgggaacc gtcacccgcg gtaccaccgg gtcaatcggc tccgcaaagt
 300
 cgaccgctgg atgtgccacc accccgcnc tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
 atgcagcaac aggcgctccg ctcgctatcg atctgggata cggcgccgcc ccctggacca
 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
 1 5 10 15
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20 25 30
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35 40 45
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50 55 60
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65 70 75 80
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85 90 95
 Arg

<210> 1677
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 1677
 nntcatgatt tcctcaatga tgccaagggtg atggaggccg gctatacctg ggtgcagggtg
 60
 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatgggtc cnnccggggag
 120
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcggtac agccgtgggtc gaatgggtcgg
 180
 gtggggcttt tcggtaaata ctacgatggg gggacgggggt cttattgctg caggtaatca
 240
 gccgcggggg ttggtgctg tggtggcgca ggagccagct atggagccct acacttacct
 300
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
 360
 tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtgtcta
 420
 cgagggtggc caccgcgatt gcctgtccga caatttgctg aattcttttag accccatccg
 480
 tagccacaaa taatgggcgg gatcgggtctt tccctcacca agacgcataa tttcccccg
 540
 gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga
 600
 attgttgaag gaccgtaagg ctccgacgcg t
 631

<210> 1678
 <211> 78
 <212> PRT

<213> Homo sapiens

<400> 1678

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Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10           15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
          20           25           30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
          35           40           45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
          50           55           60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
65           70           75

```

<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

```

nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggctctcat tccttccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg ttaccaagc cagtggatcat cttgccgtgc
180
cagcacaacc tgtgccgga gtgtgccaat gacatcttcc aggctgcaaa tccctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgccc tacctgccgc
300
cacgaggtga tcatggatcg tcacggagtg tacggcctgc agaggaaacct gctggtggag
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

```

<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

```

Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10           15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
          20           25           30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
          35           40           45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
          50           55           60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```



```

65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

```

<210> 1681

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1681

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gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtcggtt acaagaagga gccttccggg tgcccgggtgt gtggcaaggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttccg cgtggatgtg ctcagg
396

```

<210> 1682

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1682

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Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
 1          5          10          15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
          20          25          30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
          35          40          45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
          50          55          60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65          70          75          80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
          85          90          95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
          100          105          110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
          115          120          125
Asp Val Leu Arg

```

130

<210> 1683
 <211> 676
 <212> DNA
 <213> Homo sapiens

<400> 1683
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 60
 tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
 120
 gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacaccgg
 180
 accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
 240
 agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtccgg caccccaaca
 300
 tcattctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
 360
 gcctggacta cgacctctgc acgcagtgtc acatgcacaa caagcatgag ctgccccacg
 420
 ctttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
 480
 tcccaggat cccactaagg ggcattctcc agggagcgaa ggtggtgcga ggccccgact
 540
 gggagtgggg ctcacaggat ggtgagtgga ggcagagggg cggggtcagg gctgggctgt
 600
 ggctggctca tggctcagcc ttagcctgct gggggggcct ctttccccag gaggggaagg
 660
 aaaccgggccc gccgga
 676

<210> 1684
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1684
 Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
 1 5 10 15
 Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
 20 25 30
 Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
 35 40 45
 Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
 50 55 60
 Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
 65 70 75 80
 Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
 85 90 95
 Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
 100 105 110
 Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

	115		120		125										
Ser	Ala	Thr	Cys	Thr	Thr	Ser	Met	Ser	Ser	Pro	Thr	Pro	Ser	Thr	Ala
	130					135					140				
Thr	Arg	Pro	Leu	Thr	Arg	Ala	Leu	Ser	His						
145					150										

<210> 1685

<211> 2740

<212> DNA

<213> Homo sapiens

<400> 1685

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ngaggaggag ccggcggcgg ctccggggaa agggaggggg gcgctccgca gccgccgccg
60
cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
120
ggggcctccc cttctccatc ctctcttctt gcgggcaaaa ccccaggaac cggcagcaga
180
aactccggaa gcggcgttgc gggggggcggc agcgggtggtg gagggagcta ctggaaagaa
240
ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg
300
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360
gtgtctggcc cccctgccgt ttgcgagacc ctggccgctc cctccgcctc cccaatggcg
420
gcggcggcgg agggcccccga gcagagcgca gagggcagcg cgagcggcgg gggcatgcag
480
gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
540
caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
600
ctgagaaccg agatggacga gatgagggac acttttcttcg aggaggatgc ctgtcaactg
660
caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
720
ctccgcaaag ccgagcgcaa aaggctccgc tacgcccaga ccggggaaat cgacggggag
780
ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
840
catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
900
aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
960
atgaaagagt tatccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag
1020
gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttgtt
1080
aaggaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
1140
tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
1200
aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg
1260

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ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
1320
agaggcctga aggcggaact ggacgacctt aggggcatg acnnttcaac ggctcggcca
1380
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1440
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<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

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 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

405 410 415
 Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
 420 425 430
 Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
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 Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
 450 455 460

<210> 1687
 <211> 326
 <212> DNA
 <213> Homo sapiens

<400> 1687
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 tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcaactgcagc cgcagtcagg
 180
 agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
 240
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 300
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 326

<210> 1688
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 1688
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 20 25 30
 Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
 35 40 45
 Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
 50 55 60
 Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
 65 70 75 80
 Phe Glu Gln His Arg Thr Arg Val Pro
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<210> 1689
 <211> 301
 <212> DNA
 <213> Homo sapiens

<400> 1689
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 120
 ttggcctttt cccagttccat taagcctaaa caaaccacat cactttacat caggcagatc
 180
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 301

<210> 1690
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1690
 Met His Cys Gln Leu Gly Asp Val Leu Ile Trp Ser Gly Ile Leu His
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 Leu Val Ile Ala Asp Asn Thr His Val Ala Pro Arg Lys Lys Lys Leu
 20 25 30
 Ala Phe Ser Gln Ser Ile Lys Pro Lys Gln Thr Thr Ser Leu Tyr Ile
 35 40 45
 Arg Gln Ile Met Trp Tyr Gln Asn Phe Pro Val Trp Arg Thr Ile Leu
 50 55 60
 Ile Lys Ser Thr Lys Leu Leu Pro Leu Trp Leu Ser Val Lys Glu His
 65 70 75 80
 Asn Glu Glu Asn Leu Glu Pro Tyr Leu Ile Leu
 85 90

<210> 1691
 <211> 483
 <212> DNA
 <213> Homo sapiens

<400> 1691
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 120
 ttcgaagaat tcaaacgcct ggacagtcac cagacccgcg ccgagaaagg cctgggcctg
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 300
 gcgcctgcca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
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 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
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 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
 145 150 155 160
 Pro

<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
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 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtcttg cgagagtatc
 180
 cgtttttttg tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
 240
 tccggtggct gtgtgctcct gcacacctcc cgaaaggcca gcatcgtcct gaacgagacg
 300
 gccacctccc tggataacgt gctgcggacc atg
 333

<210> 1694
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1694

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Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
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Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
          20           25           30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
          35           40           45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
          50           55           60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65           70           75           80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
          85           90           95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
          100           105           110

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<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

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120
cagcacacaa cacatcggga cgttcagctc caccctccac aaatgtccgg agtgcagacc
180
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240
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300
tcagttcagc ccacatgctg caggtcaacc gggcatataa tgagaatgat gtgaccta
360
tgcggtccaa aatgaacatt atccaaaaac tcttctgaa ttctgacatc cctccaaagc
420
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480
accta
485

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<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

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Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
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Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
          20           25           30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
          35           40           45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

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      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      70              75              80
      85
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      90              95
      100              105              110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115              120              125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130              135              140
Glu Gly Tyr Leu
145

```

<210> 1697

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1697

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120
gccaaagact gcctccttgg gacaactggg gcggcagctg tgatcgacaca tggcttcagc
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240
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337

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<210> 1698

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1698

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Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
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Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
      20      25      30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35      40      45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50      55      60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65      70      75      80
His Arg Pro Leu Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85      90      95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100      105

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<210> 1699
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 1699
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 120
 ggcatatacc tgcctgcctc tctatttgcc ctggatatca atggctcaac ggtggaaaagc
 180
 accggcctgg gtctggacat cgggtgatgct gaccgaatct gttatccaat ccccgacacc
 240
 ctgtgcaatg aaccctggca aaagcgccca accgcgcaac tgctgatgac catgcacgaa
 300
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 360
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 420
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 442

<210> 1700
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1700
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 Ile Ala Asp Met Asn Gly Val Val Arg Gly Lys Arg Ile Glu Arg Thr
 20 25 30
 Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu
 35 40 45
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly
 50 55 60
 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr
 65 70 75 80
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met
 85 90 95
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu
 100 105 110
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile
 115 120 125
 Cys Ala Ala Phe Glu Leu Glu Phe Tyr Leu Ile Asp Gln Glu Asn Val
 130 135 140
 Asn Gly Arg
 145

<210> 1701
 <211> 8265
 <212> DNA
 <213> Homo sapiens

<400> 1701
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120
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240
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480
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 Glu Leu Val Ala Gln Gly Lys Val Gly Ala Ile Pro Ala Asn Ala Leu
 2370 2375 2380
 Asp Asp Gly Gln Trp Ser Gln Gly Leu Ile Ser Ala Ala Arg Met Val
 2385 2390 2395 2400
 Ala Ala Ala Thr Asn Asn Leu Cys Glu Ala Ala Asn Ala Ala Val Gln
 2405 2410 2415
 Gly His Ala Ser Gln Glu Lys Leu Ile Ser Ser Ala Lys Gln Val Ala
 2420 2425 2430
 Ala Ser Thr Ala Gln Leu Leu Val Ala Cys Lys Val Lys Ala Asp Gln
 2435 2440 2445
 Asp Ser Glu Ala Met Lys Arg Leu Gln Ala Ala Gly Asn Ala Val Lys
 2450 2455 2460
 Arg Ala Ser Asp Asn Leu Val Lys Ala Ala Gln Lys Ala Ala Ala Phe

2465 2470 2475 2480
 Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly
 2485 2490 2495
 Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu
 2500 2505 2510
 Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln
 2515 2520 2525
 Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His
 2530 2535 2540

<210> 1703
 <211> 346
 <212> DNA
 <213> Homo sapiens

<400> 1703
 ggatcccgag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta
 60
 ggaatctgtg atggagaaga atgactcctc ttcttctctg agtcctgtag taatgcattc
 120
 tctgctctac ccttctccat gactgctgcc tggctctgtcc tagccttgct ctgatccaca
 180
 ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctgg tttctcactg
 240
 gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggcagcatg
 300
 tgaatgactg tgccatccat ggccaccaag ttccctttct ctcgct
 346

<210> 1704
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1704
 Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
 1 5 10 15
 His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
 20 25 30
 Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
 35 40 45
 Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
 50 55 60
 Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
 65 70 75 80
 Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
 85 90 95
 Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
 100 105

<210> 1705
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 1705

gtgcaccttt tctcaggact cgctcagaag gtccttctgg gaggacaatg gacaagacta
60
aaccatcaaa tccattctca atgggtcaaa ttccaaattt tctgaaggg ctggcttcta
120
ctgggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagttaa tttaatcctg
180
gttttggtg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctatcc
240
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
300
cttttaactc tgcccctgca ccacagatgg aatttccac agttcctcca tacaaccctc
360
cttccttcgg agctagc
377

<210> 1706

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
		20						25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
		35					40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
		50				55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
			85						90					95	
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
		100						105						110	

<210> 1707

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1707

nnttcggtga acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc
60
catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcga
120
gttctcagcg aacgcgcaca cgaacctctc atcgctcagg ccagcgacca cattggcgga
180
gtcatccttg cgggtggtca accttccttc aaggaggacg acctagctct gctggagtgg
240
taccgcacca ccctggagga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
300

gatcttatacg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gagggccgcgt
 360
 cgactcgacc taggtgatga tgccaaggctc attgacgccca ccgacgctct gctcaaccgc
 420
 gacgcgt
 427

<210> 1708
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1708
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg
 1 5 10 15
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
 20 25 30
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
 35 40 45
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
 50 55 60
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
 65 70 75 80
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
 85 90 95
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
 100 105 110
 Leu Ala Thr Gly Ser Arg Pro Arg Leu Asp Leu Gly Asp Asp Ala
 115 120 125
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
 130 135 140

<210> 1709
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 1709
 acgcgtgaag gggaccagga gggtggacac agaccattgc aatggaaatg atgatttaga
 60
 ctggttctttt ctgactgatg actgggagtc aggggaagatg aatgcagagt ctgtgatcac
 120
 ctcctcttcc agccacatca tatctcagcc tcttgaggga aactcccata gcttgtctct
 180
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
 240
 cagggttggtg caagaggtct tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gtcattgat
 360
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac
 420
 tgcctgtgct cggtttgc aaattt
 446

<210> 1710
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1710
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
 1 5 10 15
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 20 25 30
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35 40 45
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50 55 60
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65 70 75 80
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85 90 95
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 100 105 110
 Phe Val Lys Ile
 115

<210> 1711
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1711
 ngggggattc atgtagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag
 60
 cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt ttacagctc
 120
 cctcaataca attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
 180
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaatacca
 240
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgectca cgcacctttt
 300
 gcaggctcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
 360
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat
 420
 ggatat
 426

<210> 1712
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1712
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1           5           10           15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20           25           30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35           40           45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50           55           60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65           70           75           80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85           90           95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100          105          110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 1713
tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgat aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgctcctgg
180
aatgagcctc actccctccc tgctcaaggc agcccttcac ccagccgccg ggacagggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgcctcct ggggcctggg
300
aacgcattct gctggtgact cctggggg
328

```

<210> 1714
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1714
Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1           5           10           15
Leu Ala Leu Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20           25           30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35           40           45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50           55           60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65           70           75           80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85           90           95
Ser Gly Trp

```

<210> 1715
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1715
 gttgccagcg atgggccgca tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattggttag cattatttga caagttctag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt
 240
 aatatggtgt tttttggcca actcggaagc cgggggtgctg ggggaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagttcgt ccaagggtcg
 360
 aactcattac cgtcgaatac gacgtgtgct ccacggcggt tgtcgaatcg aatcctcaaa
 420
 gtgtatccgt actcgggtgtc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1716
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
 1 5 10 15
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
 20 25 30
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
 35 40 45
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
 50 55 60
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
 65 70 75 80
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
 85 90 95
 Cys Ala Leu Thr Arg
 100

<210> 1717
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 1717

nggcatacaa cggagtaaaaa accacatcaa cagaagtgga aacaggccca gagagcgtga
 60
 gaggtttctg gtttcaagaa ggcacactga gtccctgcac ccgatgcctc tccttcccca
 120
 aatcccactg gaatacacag agagacataa aaacaaggag tgcctgtag cagagcagcc
 180
 aggctggctc atgagacaga gggagcagtc ttctgggaga catggctctt gctgctgcgg
 240
 atcagccaac agatccatgg aaagcaaagg gcccttctcc ggaggcttcc tggggcctgc
 300
 catgaatgtg tc
 312

<210> 1718

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1718

Met	Ala	Gly	Pro	Arg	Lys	Pro	Pro	Glu	Lys	Gly	Pro	Leu	Leu	Ser	Met
1				5				10						15	
Asp	Leu	Leu	Ala	Asp	Pro	Gln	Gln	Gln	Glu	Pro	Cys	Leu	Pro	Glu	Asp
			20					25					30		
Cys	Ser	Leu	Cys	Leu	Met	Ser	Gln	Pro	Gly	Cys	Ser	Ala	Thr	Gly	His
		35					40					45			
Ser	Leu	Phe	Leu	Cys	Leu	Ser	Val	Tyr	Ser	Ser	Gly	Ile	Trp	Gly	Arg
	50					55					60				
Arg	Gly	Ile	Gly	Cys	Arg	Asp	Ser	Val	Cys	Leu	Leu	Glu	Thr	Arg	Asn
65					70				75					80	
Leu	Ser	Arg	Ser	Leu	Gly	Leu	Phe	Pro	Leu	Leu	Leu	Met	Trp	Phe	Leu
				85					90					95	
Leu	Arg	Cys	Met	Pro											
			100												

<210> 1719

<211> 404

<212> DNA

<213> Homo sapiens

<400> 1719

tgatcaccac ggccctgccca ttttttgtcg ggaccgcaga ccgtatgctg cccctcgaag
 60
 tcagagacaa tccaaccggc ctgcaaaact gcggtcttgc ccggggcaac gtcgtagggg
 120
 ccaacagttt ctccaacctc ataggtagaa gaagtgtat agctgctgga aatggagatg
 180
 tggatcacat cgagcagtgg gaagtcaatg cctgccgaaa ccgaccagtt cttcgtctta
 240
 gtttctgtga tggatcgctg gaccggctgc ggagtgtcgt tgagttggaa atcgtcacgt
 300
 cccagcagag ccatcgaagt agctgcgcac cacatgaacg ggctgtccgt gtcacccgga
 360
 ttcgagcagg gagcacccat tgggtgngtgg tgtccccggg gggt
 404

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccattggccac cctttcagga cagagctgcc ctcccatgc tggaggagcc acagggcctg
 60
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca
 120
 ggcactccct gcttgatca ggggatctgg gtttcatctt cccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgccttgatt gggggatctg ggtttcatct
 240
 tcccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttgat
 300
 cgggggggtct gggttttgtg ctatacttgg tgctcccttt cactcaggcc ccttcttgac
 360
 tetgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgtcac
 420
 cctgtgactc tgcttccggt gttgtcaaat gggggtcac ccaggacccg caccactggg
 480
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Pro Ser
          115

```

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

```

acgcgtttga agctggatgc atggatatcc agcgccgcca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggctgtc aatggtgcc aatctcccgt tgagttgttg aatggcagtg
180
gcaaagttgg gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgcccag tggtcttctt ttgctggccg ccggctgtct tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcac gatgttggtg gggcggtcat cggtgatcgc
360
tgcattcaat a
371

```

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
		85				90							95		
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
		100						105					110		

<210> 1725

<211> 807

<212> DNA

<213> Homo sapiens

<400> 1725

```

ngtgcacctg gtaggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
60
atttgaagtg acctcttccc tctgagcctt ctgggtgtcca actctcccct tctctaggac
120
catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
180
gagctggagg agacttcaga ggagacaggg cattggcaga gtaggttcca gaagaacaag
240
gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
300
gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagagct
360
agtgtggag atactcgcca ggttgaggtg ctcaagaagg agctgctccg gacacaggag
420
gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggcg acaccgggac
480
cgggagttgg agaagcagct ggcggtcctg agggctcagg ctgatcgagg tcgggagctg
540
gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
600
gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctgggggca gcggcggggc
660
gcagtggaga cgacgcttcg ggagacccag gaggaaaatg acgaattccg ccggcgcacg
720
ctgggtttgg agcagcagct gaaggagact cgaggtctgg tggatggtgg ggaagcgggtg
780
gaggcacgac tacgggacaa gctgcag
807

```

<210> 1726

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1726

Asp	His	Ala	Val	Leu	Glu	Ala	Glu	Arg	Gln	Lys	Met	Ser	Ala	Leu	Val
1			5					10					15		
Arg	Gly	Leu	Gln	Arg	Glu	Leu	Glu	Glu	Thr	Ser	Glu	Glu	Thr	Gly	His
		20					25					30			
Trp	Gln	Ser	Met	Phe	Gln	Lys	Asn	Lys	Glu	Asp	Leu	Arg	Ala	Thr	Lys
		35				40					45				
Gln	Glu	Leu	Leu	Gln	Leu	Arg	Met	Glu	Lys	Glu	Glu	Met	Glu	Glu	Glu

50	55	60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg		
65	70	75
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu		80
	85	90
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser		95
	100	105
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu		110
	115	120
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln		125
	130	135
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu		140
145	150	155
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu		160
	165	170
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu		175
	180	185
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu		190
	195	200
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg		205
	210	215
Leu Arg Asp Lys Leu Gln		220
225	230	

<210> 1727

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1727

aaccaactct ccacaacatc gccagaaaca gtcgctgcc aagaggctcca ccattgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aaggacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtattt ggagcagttg cacttgcccc aaagcaaacc aatttcccca
240
aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaacctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

<210> 1728

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

1           5           10           15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
20           25           30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
35           40           45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
50           55           60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
65           70           75           80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
85           90           95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
100          105          110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
115          120          125
Gln Leu
130

```

<210> 1729

<211> 470

<212> DNA

<213> Homo sapiens

<400> 1729

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acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
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aggatcgacg tgtggctgtg gtcggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcgggccacat tcgcctcaat ggagaccggg ttaaaccctc ccacgacgtg
180
aaacccggcg ataccgtcac catccacacc cccgggatggg accgggtcct caaggtcac
240
aaccgatca cgaaaagagt cggcgccaaa ctgcggtcg aggcctacga agatctgtca
300
nngcccccg acccgctac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgacccacca agaaggatcg tcgcgagatc gatcggtcc gaggcggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcg cgaattggc
470

```

<210> 1730

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
1           5           10           15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
20           25           30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
35           40           45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100              105              110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115              120              125
Ser Arg Tyr
      130

```

<210> 1731

<211> 534

<212> DNA

<213> Homo sapiens

<400> 1731

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gagcttccag gaaccctgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tcctgacctc tctgtcccg
180
cccctgcccc gtctcaccat ggccttcttg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggccag ctcttggtcg aattgctgtg gcctctcttc
300
ctcttcttca tcctggtggc tgttcgccac tcccaccgc cctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca gggctctcatc
420
tgtaatgtga acaacacctg ctttcgcgag ctgacaccgg gcgaggagcc cgggcgcctg
480
agcaacttca acgactccct ggtctcccg cgtctacgtc ggagagaggc tgga
534

```

<210> 1732

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
      65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

```
<210> 1735
<211> 342
<212> DNA
<213> Homo sapiens
```

<400> 1735

ggcgccatgg tcatacagcat catgtgttcg gcgcccgtg cacgaatgtt cgtgcgatca
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agcgcgcctt ttagttcgac gcacggtaaa gcccggtgcgc atcgatgtag gccaggaccg
120
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
180
cggacaccgc aagcgggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg
240
ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc
300
tggcggcatc cgggcttgct aaaaccagga tgtggcaatg ct
342

<210> 1736

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25					30		
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
		35					40					45			
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50					55					60				
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65					70					75				80	
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
			85						90				95		
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105						110	

<210> 1737

<211> 506

<212> DNA

<213> Homo sapiens

<400> 1737

acgcgtgttc accatgacct ggaccgcca gcggcccgac gggtcgagcg cggaggagtc
60
ggacgagacg actgtggtgg tccctgccat ctacgcgcc caccgggtacg acgtgcaggc
120
gtccggcgcc cagtcacct cccaccagc gcaccgggtg gcgcggttgc acctcaacca
180
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
240
ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg
300
tccttttcgt gtcgtgggat gcacctggca gcaccacctc cggcccccat ggagaacagt
360

aggtatcctc gcagggtact acggccaagg catatttgac gttccacgct tgccactgcc
420
gtcttagggc catactgccg ccacgcagct gagacgggtga ccaatcgggt aaggtgactg
480
gttgccgtag tccatgcgag gccggc
506

<210> 1738
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1738
Met Ala Leu Arg Arg Gln Trp Gln Ala Trp Asn Val Lys Tyr Ala Leu
1 5 10 15
Ala Val Val Pro Cys Glu Asp Thr Tyr Cys Ser Pro Trp Gly Pro Glu
20 25 30
Val Val Leu Pro Gly Ala Ser His Asp Thr Lys Arg Thr Gly Pro Thr
35 40 45
Pro Arg Gly Arg Ala Gly Arg Lys Ser Val Trp Glu Thr Tyr Arg Ser
50 55 60
Val Leu Lys Thr Leu Glu Gly Leu Ala Gln Gly Asp Arg Asp Leu Arg
65 70 75 80
Arg Gly Thr Ala Leu Val Glu Val Gln Pro Arg His Pro Val Ala Trp
85 90 95
Val Gly Gly Asp Val Gly Ala Gly Arg Leu His Val Val Pro Val Gly
100 105 110
Arg

<210> 1739
<211> 420
<212> DNA
<213> Homo sapiens

<400> 1739
cgcggtattg aaaatgctgc tttttttact aaattaggac agcgtttaac cggcgcatta
60
catcaagtga cggttgatgg atttggtttac cgtggtgata tgcgggttacg cccttttggg
120
gagtcctgggc cattgggttag cacgtttaat tcaatagagg actattatca aacctatggt
180
cgagagtggg agtggttatgc catggttaaa gcccggtgta ttggtggtga ggacgagtac
240
aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgtttacat tgatttttagc
300
gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg
360
ttaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtggctcaa
420

<210> 1740
<211> 140
<212> PRT

<213> Homo sapiens

<400> 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1           5           10           15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
          20           25           30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
          35           40           45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
          50           55           60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
65           70           75           80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
          85           90           95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
          100          105          110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
          115          120          125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
          130          135          140

```

<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

```

nnacgcgtcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
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gggcaggctcg acgtcgtcgt ctccaaccgc ccctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gccacgggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgtctc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccgc gctggtag
378

```

<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1           5           10           15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
          20           25           30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

atcacgtaca actgcaagga ggagttccag atccatgatg agctgctcaa ggctcattac
60
acgttggggcc ggctctcggg caacacccct gagcactacc tggtgcaagg ccgctacttc
120
ctggtgcggg atgtcactga gaagatggat gtgctgggca ccgtgggaag ctgtggggcc
180
cccaacttcc ggcaggtgca ggggtgggctc actgtgttcg gcatgggaca gccagcctc
240
tcagggttca ggcgggtcct ccagaaactc cagaaggacg gacataggga gtgtgtcatc
300
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360
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420
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480
aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgctgtggcc
540
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<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
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Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20					25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40				45				
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

50		55		60	
Gln Val Gln Gly Gly	Leu Thr Val Phe Gly Met	Gly Gln Pro Ser Leu			
65	70	75	80		
Ser Gly Phe Arg Arg	Val Leu Gln Lys Leu Gln Lys Asp	Gly His Arg			
	85	90	95		
Glu Cys Val Ile Phe Cys	Val Arg Glu Glu Pro Val	Leu Phe Leu Arg			
	100	105	110		
Ala Asp Glu Asp Phe	Val Ser Tyr Thr Pro Arg Asp	Lys Gln Asn Leu			
	115	120	125		
His Glu Asn Leu Gln Gly	Leu Gly Pro Gly Val Arg	Val Glu Ser Leu			
	130	135	140		
Glu Leu Ala Ile Arg Lys	Glu Ile His Asp Phe Ala	Gln Leu Ser Glu			
145	150	155	160		
Asn Thr Tyr His Val Tyr	His Asn Thr Glu Asp	Leu Trp Gly Glu Pro			
	165	170	175		
His Ala Val Ala Ile	His Gly Glu Asp Asp	Leu His Val Thr Glu Glu			
	180	185	190		
Val Tyr Lys Arg Pro	Leu Phe Leu Gln Pro Thr Tyr Arg	Tyr His Arg			
	195	200	205		
Leu Pro Leu Pro Glu Gln Gly	Ser Pro Leu Glu Ala Gln	Leu Asp Ala			
	210	215	220		
Phe Val Ser Val Leu Arg	Glu Thr Pro Ser Leu Leu	Gln Leu Arg Asp			
225	230	235	240		
Ala His Gly Pro Pro	Pro Ala Leu Val Phe Ser Cys	Gln Met Gly Val			
	245	250	255		
Gly Arg Thr Asn Leu Gly	Met Val Leu Gly Thr Leu Ile	Leu Leu His			
	260	265	270		
Arg Ser Gly Thr Thr	Ser Gln Pro Glu Ala Ala Pro	Thr Gln Ala Lys			
	275	280	285		
Pro Leu Pro Met Glu Gln	Phe Gln Val Ile Gln Ser Phe	Leu Arg Met			
	290	295	300		
Val Pro Gln Gly Arg Arg	Met Val Glu Glu Val Asp Arg	Ala Ile Thr			
305	310	315	320		
Ala Cys Ala Glu Leu His	Asp Leu Lys Glu Val Val	Leu Glu Asn Gln			
	325	330	335		
Lys Lys Leu Glu Gly Ile	Arg Pro Glu Ser Pro Ala	Gln Gly Ser Gly			
	340	345	350		
Ser Arg His Ser Val Trp	Gln Arg Ala Leu Trp Ser	Leu Glu Arg Tyr			
	355	360	365		
Phe Tyr Leu Ile Leu Phe	Asn Tyr Tyr Leu His Glu	Gln Tyr Pro Leu			
	370	375	380		
Ala Phe Ala Leu Ser Phe	Ser Arg Trp Leu Cys Ala His	Pro Glu Leu			
385	390	395	400		
Tyr Arg Leu Pro Val Thr	Leu Ser Ser Ala Gly Pro	Val Ala Pro Arg			
	405	410	415		
Asp Leu Ile Ala Arg Gly	Ser Leu Arg Glu Asp Asp	Leu Val Ser Pro			
	420	425	430		
Asp Ala Leu Ser Thr Val	Arg Glu Met Asp Val Ala Asn	Phe Arg Arg			
	435	440	445		
Val Pro Arg Met Pro Ile	Tyr Gly Thr Ala Gln Pro	Ser Ala Lys Ala			
	450	455	460		
Leu Gly Ser Ile Leu Ala	Tyr Leu Thr Asp Ala Lys	Arg Arg Leu Arg			
465	470	475	480		
Lys Val Val Trp Val Ser	Leu Arg Glu Glu Ala Val	Leu Glu Cys Asp			

485 490 495
 Gly His Thr Tyr Ser Leu Arg Trp Pro Gly Pro Pro Val Ala Pro Asp
 500 505 510
 Gln Leu Glu Thr Leu Glu Ala Gln Leu Lys Ala His Leu Ser Glu Pro
 515 520 525
 Pro Pro Gly Lys Glu Gly Pro Leu Thr Tyr Arg Phe Gln Thr Cys Leu
 530 535 540
 Thr Met Gln Glu Val Phe Ser Gln His Arg Arg Ala Cys Pro Gly Leu
 545 550 555 560
 Thr Tyr His Arg Ile Pro Met Pro Asp Phe Cys Ala Pro Arg Glu Glu
 565 570 575
 Asp Phe Asp Gln Leu Leu Glu Ala Leu Arg Ala Ala Leu Ser Lys Asp
 580 585 590
 Pro Gly Thr Gly Phe Val Phe Ser Cys Leu Ser Gly Gln Gly Arg Thr
 595 600 605
 Thr Thr Ala Met Val Val Ala Val Leu Ala Phe Trp His Ile Gln Gly
 610 615 620
 Phe Pro Glu Val Gly Glu Glu Leu Val Ser Val Pro Asp Ala Lys
 625 630 635 640
 Phe Thr Lys Gly Glu Phe Gln Val Val Met Lys Val Val Gln Leu Leu
 645 650 655
 Pro Asp Gly His Arg Val Lys Lys Glu Val Asp Ala Ala Leu Asp Thr
 660 665 670
 Val Ser Glu Thr Met Thr Pro Met His Tyr His Leu Arg Glu Ile Ile
 675 680 685
 Ile Cys Thr Tyr Arg Gln Ala Lys Ala Ala Lys Glu Ala Gln Glu Met
 690 695 700
 Arg Arg Leu Gln Leu Arg Ser Leu Gln Tyr Leu Glu Arg Tyr Val Cys
 705 710 715 720
 Leu Ile Leu Phe Asn Ala Tyr Leu His Leu Glu Lys Ala Asp Ser Trp
 725 730 735
 Gln Arg Pro Phe Ser Thr Trp Met Gln Glu Val Ala Ser Lys Ala Gly
 740 745 750
 Ile Tyr Glu Ile Leu Asn Glu Leu Gly Phe Pro Glu Leu Glu Ser Gly
 755 760 765
 Glu Asp Gln Pro Phe Ser Arg Leu Arg Tyr Arg Trp Gln Glu Gln Ser
 770 775 780
 Cys Ser Leu Glu Pro Ser Ala Pro Glu Asp Leu Leu
 785 790 795

<210> 1745

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1745

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 120
 actgttaacc gtagcgggtc tgaagaaaaa cgttgggaca aaatccaaga attgggttaa
 180
 aaagacggta tcactttgga atttacggag ttcacaggct actcacaacc aaacaaggca
 240

actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg
 300
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt
 360
 ctttactcag gtttgaatgg aagtgacaac aagtacacta aagtagaggc tggagtgtgc
 420
 tcgcga
 426

<210> 1746
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1746
 Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val
 1 5 10 15
 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp
 20 25 30
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
 130 135 140

<210> 1747
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1747
 nnaagctttt gtccacacag ataggaagta atcatgggtca ctcaccgccc agaactgcat
 60
 atcaccgccc ctgaaggcgt gttggaggca ccggcggggt cgctcctcaa ggacggcacg
 120
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
 180
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttccagag
 240
 ggcgaggaaa ccgacctgtg ggcaggttct gttattagca acgctggaaa agtgacgctg
 300
 ttttttacct ccgtcaaggg cgacnaagac ggaaatccat cgggcagatg tcgccgacgg
 360
 caaagctacg cgt
 373

<210> 1748
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1748
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
 1 5 10 15
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
 20 25 30
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
 35 40 45
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
 50 55 60
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
 65 70 75 80
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
 85 90 95
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
 100 105 110
 Ala

<210> 1749
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 1749
 cccagcaggc aaagagagag gcctccctgg cttcgagtgt caggggagcc gcgttccttc
 60
 ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggtccagat gagggccagg
 120
 aaggggagga gagtgagggc caagaacgag ccttaaggga gcagtcccaa gctggagcca
 180
 cccagggctg ggtctgggag tcctcagtgt ccacttgctc caggttaggg ggcttgcttc
 240
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc
 300
 caggatgtac aaggtgcagc caaggcaggc catgcagggg ccgggcctgt ctgcagctgg
 360
 tggatgctg tgggcatggc tttctctggg gaccccatc ctgtcagtag caaccctggc
 420
 agtgtccgga gcggctctag acaactttgg tcataggaac tctggaggtg ggttctggtc
 480
 atctgaggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggaccact
 540
 aggttgcttc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc
 600
 acccactgtg tactggcccc gctcaggccg gcctggcaca ccgttgctg ctggcggctc
 660
 tcatggggaa gcgcctgggc actggggatt gcttgtgggc cactcaactc ttggggcagt
 720

ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcttgg tactggagct
 780
 tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccacac ctgggaggcc
 840
 aggacactga gga
 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
 1 5 10 15
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
 ggccgcatcc cgcattctggg ccgatggcga atgggcaatt tcagtcgcag acagggacat
 60
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg
 120
 gcatgggtctt ccctgtcagg aggagagagg caacgggtac agctggctcg tgccttggca
 180
 caggagcccc agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag
 240
 atcgacctcc tggagcgggt ccgaggactc ggcctgacga cggtcaccgt cattcatgac
 300
 ctcgacttgg ctgccgccta cgccgacgac ctcatcgtgc tcgactcggg tcgcatgggt
 360
 gctggcggac cggcgagcac agtgctgacg cctggccttg tccgtgacca ctttggtgtc
 420
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga
 480
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c
 531

<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

1	5	10	15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr			
	20	25	30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly			
	35	40	45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu			
	50	55	60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln			
65	70	75	80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr			
	85	90	95
Val Ile His Asp Leu Asp Leu Ala Ala Ala Tyr Ala Asp Asp Leu Ile			
	100	105	110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val			
	115	120	125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val			
	130	135	140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr			
145	150	155	

<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

gagacagtgg agaggctggg tcagtcacct gccaggaca ccccggtcct ggggccttgc
60
tgggacccga tggctctggg gactcagggc cgctgtctgc tggacagggg ttccaaggac
120
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
180
ccacccaga gaaggcccg gaaacagctg aaccctgcc ggggcaccga gagagtggac
240
cctgggttcg agggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
300
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccctgc agatgctgtt
360
gggggcntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
420
gagccccggc gctgtgcttc ctgtcggacc cagaggaccc cgctctggag agacgctgaa
480
gatgggaccc ttctctgcaa cgctgtggg atcaggtaca agaaatacgg cactcgtctg
540
tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
600
ggagtgtccc tggacccat tcaggaaggt taaaccagc ttcaccctgc tgagctgctg
660
cttctgcctc cgtttcacca gtgggagaat gggcagaagc agctctccta ggaggattgg
720
ggaaagagcc ggcctgcctc ctctctgcca tctccagatt caaggatccc gggggaagac
780
ccaggcctca ggtggcagag cctgctaggg gtcaccagc cttctccag tcagccttgg
840

ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc aggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1754
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
 1 5 10 15
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
 20 25 30
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
 35 40 45
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
 50 55 60
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
 65 70 75 80
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
 85 90 95
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
 100 105 110
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
 115 120 125
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
 130 135 140
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
 145 150 155 160
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
 165 170 175
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
 180 185 190
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
 195 200 205
 Glu Gly
 210

<210> 1755
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1755
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgct tggagtcag
 60
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag
 120
 ttggttgatga cagattttct accaacaatg ccttgactt gcctgcaaat agttgtagat
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaataggt
 240

ttattgtgga atatttcaga ttatttttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagtgtg tttaaactcg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtgggtat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1756
 Met Gly Ala Ile Arg Asn Asp Gln Gly Glu Ser Leu Ile Arg Thr Ala
 1 5 10 15
 Phe Gln Cys Leu Gln Leu Val Val Thr Asp Phe Leu Pro Thr Met Pro
 20 25 30
 Cys Thr Cys Leu Gln Ile Val Val Asp Val Ala Gly Ser Phe Gly Leu
 35 40 45
 His Asn Gln Glu Leu Asn Ile Ser Leu Thr Ser Ile Gly Leu Leu Trp
 50 55 60
 Asn Ile Ser Asp Tyr Phe Phe Gln Arg Gly Glu Thr Ile Glu Lys Glu
 65 70 75 80
 Leu Asn Lys Glu Glu Ala Ala Gln Gln Lys Gln Ala Glu Glu Lys Gly
 85 90 95
 Val Val Leu Asn Arg Pro Phe His Pro Ala Pro Pro Phe Asp Cys Leu
 100 105 110
 Trp Leu Cys Leu Tyr Ala Lys Leu Gly Glu Leu Cys Val Asp
 115 120 125

<210> 1757
 <211> 1297
 <212> DNA
 <213> Homo sapiens

<400> 1757
 nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat
 60
 gcgcacagca tccatggcac caacctcaa tatctggtgg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccctttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagttttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc
 660
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgcgctaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagcccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtcccag agtcggcgga cagatcccgt tccaagtccc caggatcatca ccgtagtcac
 900
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
 960
 agaggggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa
 1020
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tattttagtt
 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
 1260
 tgatgaccct ttcccttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5					10					15	
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
		35				40						45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
	50					55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
65					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
			85					90					95		
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
		100					105						110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
	115						120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
	130				135						140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

```

145          150          155          160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
          165          170          175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
          180          185          190
Ser Ser Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
          195          200          205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
          210          215          220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
225          230          235          240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
          245          250          255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
          260          265          270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
          275          280          285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
          290          295          300
Lys Lys Ser Arg Arg Gly Asn Glu
305          310

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<210> 1759
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 1759
aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
60
ggcctggggca gacacaatta ttgtcgggaat ccagatggtg atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgagge agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcagge tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

```

<210> 1760
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1760
Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
1          5          10          15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
          20          25          30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
          35          40          45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

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      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

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<210> 1761

<211> 351

<212> DNA

<213> Homo sapiens

<400> 1761

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ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttgggggagca tcctctgaat atataaaggc
120
agccattcat ttagggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgca gtaagacccc
240
acagtggggc caggtggtct tgcacctgt attcccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc cactcgggtc ctattggatc c
351

```

<210> 1762

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1762

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Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

<210> 1763

<211> 356

<212> DNA

<213> Homo sapiens

<400> 1763

gcgcgcgggg ggcgcgatgt ggagcgggca cttacccggt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagacctttc
 120
 accatccccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1			5					10					15		
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25				30			
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
		35					40				45				
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
		50				55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65				70				75					80		
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85					90				95			
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
		100						105				110			
Asn	Pro	Tyr	Leu	Arg	Pro										
		115													

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cgccgcgatt cttcgtgact ggcgctccgc cgccgggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag
 120
 gtgccggtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcgggc
 240
 tgctgaggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnnccgcccgcac ggccgcccattg acgcaccgcga ttgacgtgaa ccagggcgac gatgcccaacc
 60
 ccggccaaca cgccaggctg cttgacgccc ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gaggcgacg
 180
 agggacaaaac ccacctggag tccgtcggtg tgcattgccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagaggggca tgatccggat cgggttcggc gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769
 <211> 474
 <212> DNA
 <213> Homo sapiens

<400> 1769
 caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 cagggtcatt ccgttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tcctccatac tcccgcgacc acgcacgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa
 240
 atcctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggcgtcgcga ggtggcaagc ggctgccgt gagggcacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccgt gaagttgtta agcggatttg caatgccag
 420
 gccgctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 1770
 His His Ala Gly Ser Val Arg Arg Ile Arg Val Gly Glu Ser Val Leu
 1 5 10 15
 Val Thr Asp Gly Gln Gly His Ala Val Arg Gly Pro Ala Ile Glu Val
 20 25 30
 Thr Lys Gly Ser Val Ser Val Glu Thr Val Glu Ile Leu His Thr Pro
 35 40 45
 Ala Thr Thr His Arg Trp Val Ala Val Gln Ala Leu Pro Lys Ser Asp
 50 55 60
 Arg Ala Glu Leu Ala Val Ala Thr Leu Thr Glu Met Gly Val His Glu
 65 70 75 80
 Ile Leu Ala Trp Gln Ala Asp Arg Ser Ile Val Arg Trp Lys Gly Asp
 85 90 95
 Lys Gln Ala Lys Gly Val Ala Arg Trp Gln Ala Ala Ala Arg Glu Ala
 100 105 110
 Thr Lys Gln Ser Arg Arg Phe Leu Val Pro Gln Val Glu Leu Ala Gln
 115 120 125
 Thr Arg Glu Val Val Lys Arg Ile Cys Asn Ala Gln Ala Ala Tyr Val
 130 135 140
 Leu His Glu Ser Ala Ser Glu Pro Leu Val His Gln Glu Leu
 145 150 155

<210> 1771
 <211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
 60
 taataacagc ggggtgtcgca gaggaagaag cctgggagaa tggaagtcag ggaaggagag
 120
 caacaggctt ctactctgt gccatgagca tgtgctagcc atggagacac tctgcatggt
 180
 acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaata
 240
 cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
 287

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

Met	Gly	Asn	Ser	Asn	Thr	Cys	Lys	Glu	Leu	Ser	Leu	Gln	Val	Tyr	Ser
1				5				10				15			
Asp	Ile	Asn	Asn	Ser	Gly	Cys	Arg	Arg	Gly	Arg	Ser	Leu	Gly	Glu	Trp
		20					25					30			
Lys	Ser	Gly	Lys	Glu	Ser	Asn	Arg	Leu	Leu	Thr	Leu	Cys	His	Glu	His
		35				40					45				
Val	Leu	Ala	Met	Glu	Thr	Leu	Cys	Met	Leu	Pro	Arg	Thr	Ala	Asp	Ser
	50					55			60						
Leu	Leu	Trp	Asn	Tyr	Ser	Ala	Ile	Gln	Asp	Pro	Val	Lys	Tyr	Ser	Lys
65			70					75						80	
Gln	Leu	Ser	Phe	Ile	His	Thr	His	Val	His	Pro	Cys	Ala			
				85				90							

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

accggtgagt tctacgtccc ggtaaccac ctcggagggtg aacaggcgca cctcgacgtc
 60
 ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
 120
 cgtccggatt ctctgggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag
 180
 acgatcatcg atgagttcat cgcctcgggt ggctccaagt ggggtcagaa gtcgggagtc
 240
 gtgctgctgc tgccgcacgg ttacgaaggt caggggcctg atcactcgtc ggcccgtctg
 300
 gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
 360
 gcaagctaca gccatttatt gcgtcagcac gcg
 393

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa
 60
 cgggagggca tcgctaggga ggggtggggc ggccccgctt cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccttg ccacccccac cccagagggg aagctggagc
 180
 tgggaggctg cagaccagc ccaaggtgtg gccagggctg gctttcttgg gaggctttga
 240
 gcatcctgct tcctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ctcccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

      1           5           10           15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
      20           25           30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
      35           40           45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
      50           55

```

<210> 1777

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1777

```

agcttcttat cactatcctt tagtgctttt tggctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtgc aactgcggga ttttttggcc tcgctggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcatctatgt tgttattgcc ttacttcagt
240
atcagtaccc aagttataat gattattggt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

<210> 1778

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1778

```

Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
      1           5           10           15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
      20           25           30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
      35           40           45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
      50           55           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
      65           70           75           80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
      85           90           95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
      100          105          110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
      115          120

```

<210> 1779

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1779

```

ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
60
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
120
gtatgtgtgt gcatgtgcgt atgggtgtgt atatgtgtat atatgtaggt gtgtatatct
180
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
240
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
300
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
345

```

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

```

Pro Cys Val Cys Ile Cys Ser Cys Val Met Val Cys Ile Cys Val Tyr
1           5           10          15
Val Xaa Ile Cys Ile His Val Cys Tyr Gly Val Tyr Ile Cys Ile Tyr
20          25          30
Val Cys Val Tyr Ile Cys Ile Trp Val Cys Val Cys Met Cys Val Trp
35          40          45
Val Cys Ile Cys Val Tyr Met
50          55

```

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

```

nacgcgtcat gctaaatddd gccctttatg gcaacatddd cgtcagaaca agcgggaagag
60
aagctactat ccaagtttca tacgccggtt aaaagaaaac atgatgatac gagatcatct
120
gatgtgaaca caacgcaaac tggttcaagc gccacgccca ttacacctgt accettactg
180
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctccccagac acgaaagcac
240
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta
300
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
349

```

<210> 1782

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
          20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
          35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
          50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
          85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
          100           105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

```

gtgcacgact tcgacgccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcaccc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaaaat ggggtgatatg cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaataca cagagcatca gcaacttgaa
360
ggatggaagt ggaatcggcc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtggcc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctggtga acaaattcag ctttcagcta cgatccagga aacacagcaa
 1080
 tggctgctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggctctata attcactgaa gtcaaggctcg gttagacccc gtttaacca; ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttgggaaga aatgattgcc
 1380
 tcagaagttg ctcgaaaact tgcgctggtg tttaatatcc ctctccacca aattaatcag
 1440
 gtttacagac aggggtcccac cggatttcac attcttggtta gtgatcaggt aaatcaaadc
 1500
 atttggtttt ctttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaatactt atgagaatca ttttcagaga gttgggaatc
 1620
 actttggaag aacttataac caagagtttc aggcaccccta gtgataatat ggaataacaag
 1680
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1				5					10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
			20					25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
		50				55					60				
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90					95		
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100				105					110			
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

		115					120					125				
Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp	
	130					135					140					
Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp	
145					150					155					160	
Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr	
					165				170					175		
Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg	
			180				185						190			
Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp	
		195					200					205				
His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly	
	210					215					220					
Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr	
225					230					235					240	
Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu	
					245				250					255		
Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu	
			260				265						270			
Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser	
		275					280					285				
Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala	
	290					295					300					
Tyr	Val	Asn	Asn	Ser	Pro	Ser	Pro	Ala	Pro	Thr	Phe	Thr	Ser	Pro	Gln	
305					310					315					320	
Gln	Ser	Thr	Cys	Ser	Val	Pro	Asp	Ser	Asn	Ser	Ser	Ser	Pro	Asn	His	
					325				330					335		
Gln	Gly	Asp	Gly	Ala	Ser	Gln	Thr	Ser	Gly	Glu	Gln	Ile	Gln	Pro	Ser	
			340					345					350			
Ala	Thr	Ile	Gln	Glu	Thr	Gln	Gln	Trp	Leu	Leu	Lys	Asn	Arg	Phe	Ser	
			355				360					365				
Ser	Tyr	Thr	Arg	Leu	Phe	Ser	Asn	Phe	Ser	Gly	Ala	Asp	Leu	Leu	Lys	
	370				375					380						
Leu	Thr	Lys	Glu	Asp	Leu	Val	Gln	Ile	Cys	Gly	Ala	Ala	Asp	Gly	Ile	
385					390				395						400	
Arg	Leu	Tyr	Asn	Ser	Leu	Lys	Ser	Arg	Ser	Val	Arg	Pro	Arg	Leu	Thr	
				405					410					415		
Ile	Tyr	Val	Cys	Arg	Glu	Gln	Pro	Ser	Ser	Thr	Val	Leu	Gln	Gly	Gln	
			420					425					430			
Gln	Gln	Ala	Ala	Ser	Ser	Ala	Ser	Glu	Asn	Gly	Ser	Gly	Ala	Pro	Tyr	
		435					440					445				
Val	Tyr	His	Ala	Ile	Tyr	Leu	Glu	Glu	Met	Ile	Ala	Ser	Glu	Val	Ala	
	450					455				460						

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
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 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaaactt
 120
 aactcaciaa tgcctgcctc catgagcatg gagaggagga tcatattgaa ggcttttggg
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgta atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Gly	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1				5				10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20				25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50				55				60						
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70				75						80	
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85				90							95	
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100				105						110			
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
	115					120						125			

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaag atttaattgt
 60
 agggtcacct aacaaggaga tgagaacaaa ctttaaactc atctctctaa ggaatttggg
 120
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct
 240
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1789
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
 180
 gacctgctcc cgggggtctc tccgcaggc aggtctctc gccgagtctc cgaaaagggg
 240
 cggtcgtggc ggccctggcg ccagctggg caacgcttcg tggatatctca ccgcttctct
 300
 ctgttggtgcc cagcgccccg actgaagatc cggatcttca gtccctggcg cgc
 353

<210> 1790
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1790
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

      35              40              45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
  50              55              60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
  65              70              75              80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
      85              90              95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
      100              105

```

<210> 1791
 <211> 355
 <212> DNA
 <213> Homo sapiens

```

<400> 1791
aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
  60
acccccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
 120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggtccttgc
 180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
 240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgctctgt atctgtatct
 300
ccactccgat tcccatcccc tctgctgctc tctctctctt cctcccttca cgcgt
 355

```

<210> 1792
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1792
Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1              5              10              15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
      20              25              30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
      35              40              45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
      50              55              60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
  65              70              75              80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
      85              90              95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
      100              105

```

<210> 1793
 <211> 510
 <212> DNA
 <213> Homo sapiens

<400> 1793

tgggttccag cccgtagatg accttggcct gggaggcctt ccgaaggcca cacccatc
 60
 cccccctcg gagctcctcg cttaccagtc gcccaaagag cttgtcccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggtcacatc aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcatgttg atggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcacgatggc caaggccgcc ggccctcat cccctgcgct cctgcccacc tcgcccactg
 360
 ggcgctgac cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcatcaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55					60				
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65					70				75					80	
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90						95	
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
			100					105						110	
Pro	Thr	Gly	Arg												
			115												

<210> 1795

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttcttccct gggctgatca
 60
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagcccttt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctgt
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcatt agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccagggt gagagctcca tgagggcacc aatttttctc tgttttagctg tgtcctcaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1				5					10					15	
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Ile	Lys	Gln	Lys	Ile	Ala	Asp
			20					25					30		
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40					45			
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50					55					60				
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65					70					75					80
Glu	Val	Thr	Gln	Ser	Ile										
					85										

<210> 1797

<211> 348

<212> DNA

<213> Homo sapiens

<400> 1797

aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac
 60
 cggaatttgc cgatgtcatt gatcagggtca tctgtctggg ctgcgccgag cagggctcgc
 120
 gtgccgctaa tttgttggcg ccatttgctg gcggcgcatt cgtcaaatgg tgtatcacag
 180
 cgactatgtg atgccgcttg cgcccaagcc cggcagcgcg cgttggagcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctgggcaatt ttaccgggaa tgacccatgt
 300
 ggcggtggat tacctggggc attgttcggt attgtacagc ccacgcgt
 348

<210> 1798

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1           5           10           15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
          20           25           30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
          35           40           45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
          50           55           60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65           70           75           80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
          85           90           95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
          100          105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgtcgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagtctg caggaatgag caccagggcg
120
tcgattatct cagaggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
ggggtaccga agtgggcgcc tattctcggt ctcgtcctga tgagtatctt catgcttacc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1           5           10           15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
          20           25           30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
          35           40           45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
          50           55           60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65           70           75           80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```

      85              90              95
His Val Gly Gln Gly Val Pro Lys Trp Ala Pro Ile Leu Val Leu Val
      100              105              110
Leu Met Ser Ile Phe Met Leu Ile Val His
      115              120

```

<210> 1801
 <211> 597
 <212> DNA
 <213> Homo sapiens

```

<400> 1801
aatttctcct tcggtgacta cttcaagaac gaggccattc agtacgcatg ggagctcgtc
60
actaagccgg cagaacaggg cggattgggt ttcgatcctg ccagcatctg ggtgacggtc
120
cttggacctg ggtttcaccc tgactatccg gagggcgaca ttgaggcgcg cgaggcgtgg
180
cgtgctgcgg gtatccctga cgagcagatt cagggtcgct cccttaagga caactactgg
240
catatggggg ttcccggccc cggcggcccc tgctcggaaa tctacatcga tcgtggccca
300
gcctatggtc cgcacgggtg tccagaagca gatgaggacc gttaccttga gatctggaac
360
ctcgtattcg agaccgagga tctctcagcg gtgcgcgcta aagatgactt cgacatcgca
420
ggcccattgc gcagccttaa catcgacact ggtgccggtc tcgaacgtat tgccctaccta
480
ctccagggcg tcgacaatat gtacgagact gaccaggtat tcctgtcat tgagaaagcg
540
tccgagatgt cgggcaagcg gtacggcggt cgccacgacg acgacgtccg actacgc
597

```

<210> 1802
 <211> 199
 <212> PRT
 <213> Homo sapiens

```

<400> 1802
Asn Phe Ser Phe Gly Asp Tyr Phe Lys Asn Glu Ala Ile Gln Tyr Ala
1      5      10      15
Trp Glu Leu Val Thr Lys Pro Ala Glu Gln Gly Gly Leu Gly Phe Asp
20     25     30
Pro Ala Ser Ile Trp Val Thr Val Leu Gly Pro Gly Phe His Pro Asp
35     40     45
Tyr Pro Glu Gly Asp Ile Glu Ala Arg Glu Ala Trp Arg Ala Ala Gly
50     55     60
Ile Pro Asp Glu Gln Ile Gln Gly Arg Ser Leu Lys Asp Asn Tyr Trp
65     70     75     80
His Met Gly Val Pro Gly Pro Gly Gly Pro Cys Ser Glu Ile Tyr Ile
85     90     95
Asp Arg Gly Pro Ala Tyr Gly Pro Asp Gly Gly Pro Glu Ala Asp Glu
100    105    110
Asp Arg Tyr Leu Glu Ile Trp Asn Leu Val Phe Glu Thr Glu Asp Leu

```

```

      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803
 <211> 708
 <212> DNA
 <213> Homo sapiens

```

<400> 1803
cccacaacga tggccgtcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcatccttg ccctcatctc cgagatcggc accggtgggg gacaagggtca tatgggtcgag
120
tatcgcgggc aggccatcga gaagatgtcg atggagggtc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
300
cgcactctgc gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ctttcgttac ctgggggtacc aaccgggggc agggatcccc cctaggcggt
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttggagta
480
catggatttg accccgacga gatcgggttc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttccgggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804
 <211> 236
 <212> PRT
 <213> Homo sapiens

```

<400> 1804
Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1      5      10      15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
      20      25      30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

```
<210> 1805
<211> 833
<212> DNA
<213> Homo sapiens
<400> 1805
nccgcagtggtggtgtgggacaa gaacaccgggt gagccgggttt ataacgccat cgtgtgggcag
60
gacacgcgcga ctcaaaagat ctgtaacgaa ctagctggtg acaagggcgc cgaccgctac
120
aaggagatct gtggtctggg cctgtcgacc tatttctctg gcccgaaagg caaatggatt
180
ctcgacaacg ttgaggggagc ccgtgctgagg gccgaggccg gcgatctgct cttcggtaac
240
atggacactt ggggtgctgtg gaacctgact ggcggtacta acggtggcgt gcacatcacc
300
gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360
tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtcctcctcc
420
gagatctacg gctatggtcg caagaacggc ctgctgatcg ataccccgat ctccggcatt
480
cttggcgatc agcaggccgc cacctttggc caggcttgct tccaaaaggg catggcgaag
540
aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
600
gagaacggtc tgctgaccac cgtctgctac aagattgggtg accagcccac cgtctatgcc
660
```


ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag
 720
 atgttcgaga ccgccccgca aatcgaagcc ctcgccaaca ccgtcgagga caatggtggc
 780
 gcctactttg tgccggcctt ctctggcctg ttcgcgccgt actggcgctcc gga
 833

<210> 1806
 <211> 277
 <212> PRT
 <213> Homo sapiens

<400> 1806
 Xaa Ala Val Val Trp Asp Lys Asn Thr Gly Glu Pro Val Tyr Asn Ala
 1 5 10 15
 Ile Val Trp Gln Asp Thr Arg Thr Gln Lys Ile Cys Asn Glu Leu Ala
 20 25 30
 Gly Asp Lys Gly Ala Asp Arg Tyr Lys Glu Ile Cys Gly Leu Gly Leu
 35 40 45
 Ser Thr Tyr Phe Ser Gly Pro Lys Val Lys Trp Ile Leu Asp Asn Val
 50 55 60
 Glu Gly Ala Arg Ala Arg Ala Glu Ala Gly Asp Leu Leu Phe Gly Asn
 65 70 75 80
 Met Asp Thr Trp Val Leu Trp Asn Leu Thr Gly Gly Thr Asn Gly Gly
 85 90 95
 Val His Ile Thr Asp Pro Thr Asn Ala Ser Arg Thr Met Leu Met Asp
 100 105 110
 Val Arg Lys Leu Gln Trp Asp Asp Ser Met Cys Glu Val Met Gly Ile
 115 120 125
 Pro Lys Ser Met Leu Pro Glu Ile Lys Ser Ser Ser Glu Ile Tyr Gly
 130 135 140
 Tyr Gly Arg Lys Asn Gly Leu Leu Ile Asp Thr Pro Ile Ser Gly Ile
 145 150 155 160
 Leu Gly Asp Gln Gln Ala Ala Thr Phe Gly Gln Ala Cys Phe Gln Lys
 165 170 175
 Gly Met Ala Lys Asn Thr Tyr Gly Thr Gly Cys Phe Met Leu Met Asn
 180 185 190
 Thr Gly Glu Glu Ala Ile Phe Ser Glu Asn Gly Leu Leu Thr Thr Val
 195 200 205
 Cys Tyr Lys Ile Gly Asp Gln Pro Thr Val Tyr Ala Leu Glu Gly Ser
 210 215 220
 Ile Ala Val Ala Gly Ser Leu Val Gln Trp Leu Arg Asp Asn Leu Lys
 225 230 235 240
 Met Phe Glu Thr Ala Pro Gln Ile Glu Ala Leu Ala Asn Thr Val Glu
 245 250 255
 Asp Asn Gly Gly Ala Tyr Phe Val Pro Ala Phe Ser Gly Leu Phe Ala
 260 265 270
 Pro Tyr Trp Arg Pro
 275

<210> 1807
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 1807

```

nnntatcggc aaggtggtcg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
60
gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
120
acaggcacac cgggtgcgtgg tggcttcaca ttccgagaag gccactacat atgcgaggcg
180
gtagctgaga cgggctcggt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
240
aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcggtc ggcgctgggg
300
gagacgttc tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc
360
cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
420

```

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

```

His Val Arg Arg Asp Arg Pro Ile His Leu Ser Phe Asp Val Asp Ala
1      5      10      15
Met Asp Pro Ser Val Ala Pro Ser Thr Gly Thr Pro Val Arg Gly Gly
20     25     30
Leu Thr Phe Arg Glu Gly His Tyr Ile Cys Glu Ala Val Ala Glu Thr
35     40     45
Gly Ser Leu Val Ala Met Asp Met Val Glu Val Asn Pro His Leu Glu
50     55     60
Lys His Ala Ala Glu Gln Thr Ile Ala Val Gly Cys Ser Leu Ile Arg
65     70     75     80
Ser Ala Leu Gly Glu Thr Leu Leu
85

```

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

```

nnaccggtga tcgcatcggt gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
60
cagaccggtg tcacgcatgc gtatcgctc gggcatggca gcctcctcgt gatgcggggc
120
cccacccagg ccgaatggca gcatcgctg ccgaaagcgc cgggtgtgca gggcgagcgc
180
gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc
240
ccgaggtgcc cggatcgccg ggcgattcgc gccccgtttt cgcgattcat gcgcgatcga
300
tacgggcagg cggtcgcgtg tgcggcacgt tgccgcacgn
340

```

<210> 1810
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1 5 10 15
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
 20 25 30
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
 35 40 45
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
 50 55 60
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
 65 70 75

<210> 1811
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1811
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttatacttca
 60
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttggtg
 120
 ctgaaacggg gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcggaag
 180
 caggtactgg aaaagaaggg cgatgcactg ctacacgcag gtcagctcat ggaggccgctc
 240
 gagtgctatg ctcaggccca gacaccggcc tttgaacagg ttgtgctttc tttgatggac
 300
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
 360
 caagctcgcg tgctctgtct catgctggct acttgggtca ttgaattgta tgtggccgcc
 420
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
 480
 acacttgagc ggcacatga
 500

<210> 1812
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1812
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1 5 10 15
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
 20 25 30
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
  50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
  65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100              105              110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115              120              125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130              135              140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
  145              150              155              160
Thr Leu Glu Arg His His
      165

```

<210> 1813
 <211> 426
 <212> DNA
 <213> Homo sapiens

```

<400> 1813
tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
  60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
  120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
  180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
  240
aataagggtt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
  300
ccgctgtaga tcctccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
  360
aacaatgggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
  420
tctaca
  426

```

<210> 1814
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 1814
Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1              5              10              15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20              25              30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35              40              45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815
 <211> 303
 <212> DNA
 <213> Homo sapiens

```

<400> 1815
ggcgccacaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
60
cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120
cgtgccgatc tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180
ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240
ccggttccag cagtggaaca cgttcgcctc gggcagacgg gcggcatcgg cgatcacggt
300
acc
303

```

<210> 1816
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1816
Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1      5      10      15
Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20      25      30
His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35      40      45
Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50      55      60
Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65      70      75      80
Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85      90      95
Gly Thr

```

<210> 1817
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt cgatgcgctg
60
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<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

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		20						25					30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50					55				60					
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<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

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<210> 1820

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 35 40 45
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50 55 60
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65 70 75 80
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 Arg Met

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 <212> DNA
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<210> 1822
 <211> 55
 <212> PRT
 <213> Homo sapiens

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 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
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 35 40 45
 Glu Ala Ala Gln Arg Met Thr
 50 55

<210> 1823
 <211> 387
 <212> DNA
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 240
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 387

<210> 1824
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1824
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 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
 20 25 30
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
 35 40 45
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
 50 55 60
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
 65 70 75 80
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
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<210> 1825
 <211> 413
 <212> DNA
 <213> Homo sapiens

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<210> 1826
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1826
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 Trp Ala Pro Arg His His Val Ala Gly Arg His Gly His Val Gly Val
 35 40 45
 Val Pro Arg Tyr Ala Arg Pro Phe Leu Leu Ser Val Gly Leu Val Cys
 50 55 60
 Leu Glu Arg Asp Ala Trp Pro Thr Gly Thr Arg Cys Ile Gly Gly Leu
 65 70 75 80
 Pro Val Gly His Ala Ala Gly Ser Gly Leu Arg Cys Val Ala Asp Pro
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 Arg Ala Ser Leu Gly Val Met Cys Leu Pro Ala Pro Met Pro Phe Ile
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<210> 1827
 <211> 345
 <212> DNA
 <213> Homo sapiens

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<210> 1828
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1828
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 35 40 45
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
 50 55 60
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
 65 70 75 80
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
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 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
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<210> 1829
 <211> 4457
 <212> DNA
 <213> Homo sapiens

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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

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Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
	35						40					45			
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
	50					55					60				
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
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Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
				85					90					95	
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
		100						105					110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
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Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
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Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
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His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
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His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
		180						185					190		
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
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Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

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Asp Ser Ser Arg Thr Leu Tyr Ala Phe Ser Ala Ile Lys Ala Ile Leu
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Lys Thr Asn Pro Ile Ala Phe Val Asn Ala Ile Ser Thr Thr Ser Val
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Arg His Arg Ile Ser Val Met Gly Lys Asp Phe Tyr Ser His Ile Pro
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Val Asp Ser Asn His Asn Phe Arg Ser Ser Met Tyr Ile Glu Ile Leu
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Lys Val Thr Ala Gln Asp Leu Ile Gly Asn Arg Asn Met Gln Met Met
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Glu Ser Ser Ala Lys Gly Phe Pro Ser Phe Ile Ser Asp Met Leu Ser
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Lys Cys Lys Val Gln Lys Val Ile Leu His Cys Leu Leu Ser Ser Ile
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Phe Ser Ala Gln Lys Trp His Ser Glu Lys Met Ala Gly Lys Asn Leu
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Val Ala Val Glu Glu Gly Phe Ser Glu Asp Ser Leu Ile Asn Phe Ser
465          470          475          480
Glu Asp Glu Phe Asp Asn Gly Ser Thr Leu Gln Ser Gln Leu Leu Lys
          485          490          495
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          515          520          525
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          530          535          540
Pro Ile Thr Cys Gln Gly Met Phe Leu Cys Ala Val Ile Arg Ala Leu
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His Gln His Cys Ala Cys Lys Met His Pro Gln Trp Ile Gly Leu Ile
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          580          585          590
Ser Val Thr Leu Gln Leu Cys Arg Asn Leu Asp Asn Leu Ile Gln Gln
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Tyr Lys Tyr Glu Thr Gly Leu Ser Asp Ser Arg Pro Leu Trp Met Ala
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Ser Ile Ile Pro Pro Asp Met Ile Leu Thr Leu Leu Glu Gly Ile Thr
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705					710					715					720		
Gln	Gln	Ile	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Ser	Met	Asn	His	Gly	Val		
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Pro	Ala	Pro	Gly	Gln	Phe	Leu	Ile	Leu	Gly	Val	Leu	Asn	Glu	Phe	Ile		
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Met	Lys	Asn	Pro	Ser	Leu	Glu	Asn	Lys	Lys	Asp	Gln	Arg	Asp	Leu	Gln		
865					870					875					880		
Asp	Val	Thr	His	Lys	Ile	Val	Asp	Ala	Ile	Gly	Ala	Ile	Ala	Gly	Ser		
				885					890					895			
Ser	Leu	Glu	Gln	Thr	Thr	Trp	Leu	Arg	Arg	Asn	Leu	Glu	Val	Lys	Pro		
		900					905					910					
Ser	Pro	Lys	Ile	Met	Val	Asp	Gly	Thr	Asn	Leu	Glu	Ser	Asp	Val	Glu		
		915					920					925					
Asp	Met	Leu	Ser	Pro	Ala	Met	Glu	Thr	Ala	Asn	Ile	Thr	Pro	Ser	Val		
	930					935					940						
Tyr	Ser	Val	His	Ala	Leu	Thr	Leu	Leu	Ser	Glu	Val	Leu	Ala	His	Leu		
945					950					955					960		
Leu	Asp	Met	Val	Phe	Tyr	Ser	Asp	Glu	Lys	Glu	Arg	Val	Ile	Pro	Leu		
				965					970					975			
Leu	Val	Asn	Ile	Met	His	Tyr	Val	Val	Pro	Tyr	Leu	Arg	Asn	His	Ser		
			980					985					990				
Ala	His	Asn	Ala	Pro	Ser	Tyr	Arg	Ala	Cys	Val	Gln	Leu	Leu	Ser	Ser		
		995					1000										

1090	1095	1100
Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu		
1105	1110	1115
Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe		1120
	1125	1130
Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp		1135
	1140	1145
Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln		1150
	1155	1160
Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val		1165
	1170	1175
Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser		1180
1185	1190	1195
Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe		1200
	1205	1210
Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln		1215
	1220	1225
Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu		1230
	1235	1240
Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val		1245
	1250	1255
Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu		1260
1265	1270	1275
Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu		1280
	1285	1290
Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe		1295
	1300	1305
Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly		1310
	1315	1320
Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys		1325
	1330	1335
Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln		1340
1345	1350	1355
Lys Ile Glu Glu Met Val Glu Lys Asp Phe Leu Glu Gly Met Ile Lys		1360
	1365	1370
		1375

Thr

<210> 1831
 <211> 508
 <212> DNA
 <213> Homo sapiens

<400> 1831
 nntcatgaaa ggagaggccg tatgccatt gtcaaactca gtgcgcagtt cgtgcgcgaa
 60
 gcggtttgcc cgcccgaaaa atccaagggtg gactattacg acaacgcact caaagggttc
 120
 atcctggagg ctgcaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac
 180
 ggcaagctgc gccaatgcaa gatcggtgat gctgctgcgg tcagctacga caaggcccg
 240
 cagaaggcca tgcggttgcg ttggaagggtg gaatgggggg gcaatccatt ggaggagcgc
 300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgccgcac
 360
 atccacctgc accggaggaa ttttcagtcc acgctgagct tcctcaagtg ccatgtcctg
 420
 ccgcgctttg gagccaagca cctggacgaa atcacgacca acatgctggc cgaggctcac
 480
 caggatctgc gcacgaaggc ctacgcgt
 508

<210> 1832
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 1832
 Xaa His Glu Arg Arg Gly Arg Met Pro Ile Val Lys Leu Ser Ala Gln
 1 5 10 15
 Phe Val Arg Glu Ala Val Cys Pro Pro Gly Lys Ser Lys Val Asp Tyr
 20 25 30
 Tyr Asp Asn Ala Leu Lys Gly Phe Ile Leu Glu Ala Arg Pro Ser Gly
 35 40 45
 Gly Lys Thr Phe Tyr Leu Arg Tyr His Asp Ser His Gly Lys Leu Arg
 50 55 60
 Gln Cys Lys Ile Gly Asp Ala Ala Ala Val Ser Tyr Asp Lys Ala Arg
 65 70 75 80
 Gln Lys Ala Met Arg Leu Arg Trp Lys Val Glu Trp Gly Gly Asn Pro
 85 90 95
 Leu Glu Glu Arg Gln Ala Leu Arg Ala Val Pro Thr Leu Ala Glu Phe
 100 105 110
 Ile Arg Glu Thr Tyr Val Pro His Ile His Leu His Arg Arg Asn Phe
 115 120 125
 Gln Ser Thr Leu Ser Phe Leu Lys Cys His Val Leu Pro Arg Phe Gly
 130 135 140
 Ala Lys His Leu Asp Glu Ile Thr Thr Asn Met Leu Ala Glu Ala His
 145 150 155 160
 Gln Asp Leu Arg Thr Lys Gly Tyr Ala
 165

<210> 1833
 <211> 430
 <212> DNA
 <213> Homo sapiens

<400> 1833
 acgcgtgcga tgttgaagga gcgcttcggc atcgggcatg cgacgctgca ggttgaactg
 60
 tccgggtgccg aggcagacga tgccgaggcg ggcggctgct aagggtcgcc gtcgttcagt
 120
 ggcgcaaagc ggcgatgatc gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca
 180
 gcataccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttgga
 240
 gcggcttggg ctcggttcc cagcgttccg gcggcggcga gccattttgg aaatcgacga
 300

acatctccgg cgctcctgct gtcaggeget gaaggatcg aaagtcatgc gccgtgacaa
 360
 aggaagatcg gcgacacagg agccgaagcg ccgccgctg caataagcgc gcgcgatcgc
 420
 aattgtcggg
 430

<210> 1834
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1834
 Met Arg Arg Cys Arg Leu Asn Cys Pro Val Pro Arg Gln Thr Met Pro
 1 5 10 15
 Arg Arg Ala Ala Lys Gly Arg Arg Arg Ser Val Ala Gln Ser Gly
 20 25 30
 Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln
 35 40 45
 His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala
 50 55 60
 Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg
 65 70 75 80
 Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln
 85 90 95
 Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala
 100 105 110
 Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln
 115 120

<210> 1835
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 1835
 nataactcaag gactttgacg gcacccgagc ccggttgctc cctgaggcca tcatgaaccc
 60
 cccagtggca ccctatgcta ctgtggcacc cagcacttta gcccaccccc agggccaggc
 120
 tctggcccg cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctccccagac
 180
 gctgcagcac cctcagggtta tcccgccacc ccaggcactg tcccaccctc agagcctcca
 240
 gcagcctcag ggctggggc accctcagcc catggcccaa acccagggtt tgggtccacc
 300
 tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg
 360
 gaagatgcca gactcagatg cccccccgaa tgtgaccgtg tctacctcaa ctatccccct
 420
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca
 480
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgaggggcca
 540

gatcgccaac cccagcccca ttagtcgcag tctgctcatc aatgcaagca cccgggtgtc
 600
 gaccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacacca
 660
 cgcggccacc gccgcgg
 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
 Gly His His Glu Pro Pro Ser Gly Thr Leu Cys Tyr Cys Gly Thr Gln
 1 5 10 15
 His Phe Ser Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro
 20 25 30
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala
 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
 100 105 110
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
 115 120 125
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
 130 135 140

<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 1837
 nntctagaac actctgcccc tgaatctgta ccgggattgt ttggcccgtc acgaactcgt
 60
 acggtcgata tcaatatcac tgggttttct tcacagtatt taccgcccc ctatggacca
 120
 attgctgcgg acgtcaaaca aacctgggcg tgggaccac aggatctgac gattgtctca
 180
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg
 240
 accccgatcc agtaaccttc gataacgcga aagccggcac cccacataac tcggnrtgtac
 300
 accgaagtcc ctgccaacgt tccatccgac ataggggagt taactaaccg aattatcaag
 360
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actggcttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcacccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgcgg ttattgcac catttcgcgg cgtcaatggc actcatggca
 540
 cgacttgaag gtattccgtc acgc
 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro
 1 5 10 15
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
 ncaatacggc tgaacaccgc tgatatacc cgtactttcc ccgtcaacgg aaaattttcc
 60
 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttcctg gcaataaaatt ccgcgacgtc catgctgcag cgatgaatgt tctgcctcc
 180
 cgccttgagg actgggggct tatgccggtc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttgat gccgcacggc accagccacc atctagggct ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

```

      50              55              60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
65              70              75              80
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
      85              90              95
Leu Asp Val His
      100

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<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

```

<400> 1841
nnctccaaga acgtcccgga gtggggcccc agggcgctcg aactccccgg cgggcccggg
60
gtcgatccgg tggtcgagat cggcggtccc ggtacgctag cccaatcgat ggtcgccccg
120
cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcgggtgagg
180
acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccggtcgg cagccgcgcg
240
cagcaactcg cgatgatcgc ggggggtcgag gcgaacggca tccgtccgat cctcgaccag
300
catttcccgc tcgaaaatct ccccgacgcg
330

```

<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

```

<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1              5              10              15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
      20              25              30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
      35              40              45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
      50              55              60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65              70              75              80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
      85              90              95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
      100              105              110

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<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
 60
 acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat
 120
 tagataaaga agatttattg agtcctatta atcaaaatac cctgcaacga tcttcctcag
 180
 tgcgggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
 240
 tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
 300
 acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggaggtcttc
 360
 catctggaac tggaggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
 420
 ttacggaaat aatgaattca atccattcag atgcctctcn cnnccncccc ccc
 473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1			5					10					15		
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
		20					25					30			
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
	35					40					45				
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
	50					55					60				
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65			70					75					80		
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85					90					95		
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
		100					105						110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
	115					120					125				
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
	130					135					140				

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgcac aatgagtggga
 60
 gtgacttgct gcctccgctt cccggggcag ctcaactcgg accttcggaa acttgcaagt
 120
 aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
 180

cgtggctccc agcagtaccg tgctctcact gtccctgagc tgaccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgctgacctg cgctcatggcc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1846
 Lys Leu Thr Thr Pro Ser Phe Gly Asp Leu Asn His Leu Ile Ser Ala
 1 5 10 15
 Thr Met Ser Gly Val Thr Cys Cys Leu Arg Phe Pro Gly Gln Leu Asn
 20 25 30
 Ser Asp Leu Arg Lys Leu Ala Val Asn Leu Ile Pro Phe Pro Arg Leu
 35 40 45
 His Phe Phe Met Val Gly Phe Ala Pro Leu Thr Ser Arg Gly Ser Gln
 50 55 60
 Gln Tyr Arg Ala Leu Thr Val Pro Glu Leu Thr Gln Gln Met Trp Asp
 65 70 75 80
 Ser Lys Asn Met Met Cys Ala Ala Asp Pro Arg His Gly Arg Tyr Leu
 85 90 95
 Thr Val Ser Ala Met Phe Arg Gly Lys Met Ser Thr Lys Glu Val Asp
 100 105 110
 Glu Gln Met Leu Asn Val Gln Asn Lys Asn Ser Ser Tyr Phe Val Glu
 115 120 125
 Trp Ile
 130

<210> 1847
 <211> 343
 <212> DNA
 <213> Homo sapiens

<400> 1847
 cagccgtgct ttcctgcgtc aactcgggaa cggctatatc gcgcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgctcaa gctggcgacc
 120
 ctggccgccc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag
 180
 caaaaaagtt gcggacaatc tcctgcccga tggctcgggtg ttcgacttca gggagcgcca
 240
 tgcaactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactagggt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca
 240
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

65					70					75					80
Trp	Met	Tyr	Pro	Val	Asn	Glu	Glu	Leu	Tyr	Ser	Arg	Thr	Leu	Gln	Pro
				85					90					95	
Leu	Leu	Phe	Ile	Asn	Ser	Ala	Lys	Phe	Gln	Thr	Pro	Lys	Asp	Ile	Ala
			100					105					110		
Lys	Met	Lys	Lys	Phe	Tyr	Gln	Pro	Asp	Lys	Glu	Arg	Lys	Xaa	Asp	Tyr
		115					120						125		
Asn	Gln														
	130														

<210> 1851

<211> 574

<212> DNA

<213> Homo sapiens

<400> 1851

```

ncgatcggag aggctttccg cactggtgac ttggactcta agcccgaccc cagccgggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttctgct gctcttcatt aagctcaggt ggttctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttctctg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acggggggaca gctggaccca gaacacgccc aatg
574

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<210> 1852

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1852

Xaa	Ile	Gly	Glu	Ala	Phe	Arg	Thr	Gly	Asp	Leu	Asp	Ser	Lys	Pro	Asp
1				5					10					15	
Pro	Ser	Arg	Ser	Phe	Arg	Pro	Tyr	Arg	Ala	Glu	Asp	Asn	Asp	Ser	Tyr
			20					25					30		
Ala	Ser	Glu	Ile	Lys	Glu	Leu	Gln	Leu	Val	Leu	Ala	Glu	Ala	His	Asp
		35				40					45				
Ser	Leu	Arg	Gly	Leu	Gln	Glu	Gln	Leu	Ser	Gln	Glu	Arg	Gln	Leu	Arg
	50				55					60					
Lys	Glu	Glu	Ala	Asp	Asn	Phe	Asn	Gln	Lys	Met	Val	Gln	Leu	Lys	Glu
65				70				75					80		
Asp	Gln	Gln	Arg	Ala	Leu	Leu	Arg	Arg	Glu	Phe	Glu	Leu	Gln	Ser	Leu

```

      85              90              95
Ser Leu Gln Arg Arg Leu Glu Gln Lys Phe Trp Ser Gln Glu Lys Asn
      100              105              110
Met Leu Val Gln Glu Ser Gln Gln Phe Lys His Asn Phe Leu Leu Leu
      115              120              125
Phe Met Lys Leu Arg Trp Phe Leu Lys Arg Trp Arg Gln Gly Lys Val
      130              135              140
Leu Pro Ser Glu Gly Asp Asp Phe Leu Glu Val Asn Ser Met Lys Asp
145              150              155              160
Leu Tyr Leu Leu Met Glu Glu Asp Glu Ile Asn Ala Gln His Ser Asp
      165              170              175
Asn Lys Ala Cys Thr Gly Asp Ser Trp Thr Gln Asn Thr Pro Asn
      180              185              190

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<210> 1853
 <211> 338
 <212> DNA
 <213> Homo sapiens

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<400> 1853
gccggcgccg accaagccac ggcattgcccc acccaccttg gaagaggtgt cgttccgcca
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cgtcattgag gagcgcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gcctgcgacg ggcattggcac ttctgcgcac ctcgcaccac atggatggca aggtcggcac
180
gacgtttttac ctggatgacg atgtcatttt tgcgcgcgcca cagaagcagc gctcagccga
240
gggccagcga ctgaatacag agcccgtctc tttggccgag ttgctcgagc gcgctgctgc
300
atagaataca tatacccaag ctatgatgat gccgtcgt
338

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<210> 1854
 <211> 100
 <212> PRT
 <213> Homo sapiens

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<400> 1854
Met Pro His Pro Pro Trp Lys Arg Cys Arg Ser Ala Thr Ser Leu Arg
1      5      10      15
Ser Ala Pro Ser Lys Leu Thr Cys Ser Ser Ala Arg Ser Ile His Ser
20     25     30
Ser Leu Arg Arg Ala Trp His Phe Cys Ala Ser Arg Thr Thr Trp Met
35     40     45
Ala Arg Ser Ala Arg Arg Phe Thr Trp Met Thr Met Ser Phe Leu Ser
50     55     60
Arg His Arg Ser Ser Ala Gln Pro Arg Ala Ser Asp Ser Asn Thr Ser
65     70     75     80
Pro Ser Leu Trp Pro Ser Cys Ser Ser Ala Leu Leu His Arg Ile His
85     90     95
Ile Pro Lys Leu
100

```

<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
 60
 ccgagcgaaa cgcaggaaat cgtggcgcac gtcctggacc tggacaacca cgaggtcacg
 120
 gtgcagtgct tgcgcatggg cgggtggcttt ggcggtaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgaccctg accgggcgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccggaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagcctgg acctctcgga gccgggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgccctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcacgata atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgcccag gagcagccac catcgcccg ccatgctgcg gcaactcgata ccaatacgtt
 240
 gcgcttcaac caatcgatct tggtcgagggc atgcgcgcca tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcatg tcgacagggg gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5					10					15	
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
			20					25					30		
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
		35				40					45				
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
	50				55					60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65				70					75					80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
			85					90						95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
				100											

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgctcac caacttcctc tacttccgca agatggattt ggattttctg
 60
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattgtt
 180
 ctgatcggag ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg
 300
 agcaatctgg gcctgttcac ctttacggct gcatacttac catgg
 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccggggcgt tagaaaagcc
 60
 aatagtgagc ttcattcagt cggccttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaaat ggaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggtttatt ccatgcttat
 420
 cgtttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

1	5	10	15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met			
20	25	30	
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu			
35	40	45	
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr			
50	55	60	
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe			
65	70	75	80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe			
85	90	95	
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu			
100	105	110	
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln			
115	120	125	
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile			
130	135	140	
Ala			
145			

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

```

nggatcctca cgcccgccat catacgtggg atacgttga gcaaatgcgt catgacgggg
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tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctggct gatcacgtct
120
ggatcgtcga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttggga agatgtgttc ctactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcacct caggccgcac cggctgctgc acgctgctgc
300
aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgtcattc ccatcgggat catcgtcgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctcaagtctg gcgctcgcca tctggtcgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgctcgaacg attgtccgca
540
accccgttag gtcggtcggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgctcagg tgatactgct tgtcatcadc tcttttagcgc tgggctggca ccccaacggt
660
tccggcctgg cctggctccc aaccctggtg agcgttgtgc tcgcatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcaactctcg actggccaac
780
ttgtataca tc
792

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<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc
 60
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcggcc tcgtggaaga gcccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctccgggctg
 360
 ggcatgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtcgagcct
 480
 cttaactctt cccagcccag tctccgtgct caagtgcctc agtttctatc ccctcaggtt
 540
 caagcacagc ttttgagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc
 600
 tcgcccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacgtt tacaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50					55					60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65					70				75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
		100					105					110			
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
	115					120					125				
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
130					135				140						
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145					150				155					160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
			165				170					175			
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
	180						185				190				
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195					200				205					
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
210					215					220					
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1867

nnggggcacg gttagggcca gtgggcagag gggtgaggga tatgcaggac cttccactgt
60
tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg
120
gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
180
tctggttggc tggccctgtt acccaacaac gtggtggcca aggccttggt cccggagagg
240
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
300
cctctcctgc ctccaccct tccaccnng cagccccgc ctctcccgca gaactctccc
360
caagccagac cgctggacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
420
gcgaggtgct ttgcacccc aagtgatcat gttcccgtag ccagcctgcc aaggtgatgt
480
ggagcttggt gagcgggggc tggcagggct tttccgga
518

<210> 1868

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1868

Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
1 5 10 15
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
20 25 30
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
35 40 45
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
50 55 60
Gln Ala Arg Pro Pro Gly Pro Ala Ala
65 70

<210> 1869

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1869

acgcgtcacc ttctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga
60
ccgtgacatg ccgagcaccc aaaccacact gtggattcgc gagctgagcc gcatcgaccg
120

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
180
gaccgacgat ggcaccgagc ctgagggttg tgccctgcc a gcggtctact gccgtcgttg
240
cgcccgagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
300
cgacagcatc cgacggaccc acgcggcaca cgacggctgc ttccgagcct tgctttcggc
360
ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgctggtt
420
cgacaccgtc aacagg
436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10					15	
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40					45			
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55					60				
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
65					70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
				85					90					95	
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105						110	
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggctcg atgtctccaa cgtctttgcc agccttgaca tggctagcga
60
gcccgcctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
120
cattggatcg aggagtcgac gtcgacggtg tttttcggcg gcgccggaat gtccaccgaa
180
tcaggatttc cggacttttcg ctcggttggc gggctttaca ccactcagca tgacctgccc
240
ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatccccgc ggagttcttc
300
gacttctacc gcacctacct catccatcct caggccaggc ccaatgctgg tcatcgtgcg
360

Part 2

ttggttgccct tggagcaggc tggggaactt tcgacgatca ttaccagaa tattgacggc
420
ctgcaccaag aagctgggtc tcgtcaggtc attgagttgc atgggtcggc gcac
474

<210> 1872
<211> 125
<212> PRT
<213> Homo sapiens

<400> 1872
Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
1 5 10 15
Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
20 25 30
Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
35 40 45
Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
50 55 60
Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
65 70 75 80
Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
85 90 95
Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
100 105 110
Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
115 120 125

<210> 1873
<211> 338
<212> DNA
<213> Homo sapiens

<400> 1873
nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg
60
ggttccctcg gggatctcgg aggggagacc cccacccggg aggactggag gcagcgcctc
120
tcccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccgcggc
180
ccgcaggggg cgcgctcaag gcaaggtccg cggcgagaaac ggtgcccagt gggagcgaag
240
ggcgaggcca gcccttggtc cttggccggc agttcgggtc ccgcctccaa attttagtat
300
gcatatgagt caccaggaaa gttttttgaa acaaattt
338

<210> 1874
<211> 93
<212> PRT
<213> Homo sapiens

<400> 1874
Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1875

```

aagcttggcg tacaagtggg tcgtcgtttc tcaggtgggt gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttccg tgattttgga
120
aaattcacag aaccctgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattd tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

<210> 1876

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1876

```

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

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115

120

<210> 1877

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1877

acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac tacccattaa
60
cgagggttatg caaattgcag aaatctctct atcggattgt ggctataatta tttcatcttt
120
ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
180
tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc
240
gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg
300
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357

<210> 1878

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1878

Met	Gln	Ile	Ala	Glu	Ile	Ser	Leu	Ser	Asp	Cys	Gly	Tyr	Ile	Ile	Ser
1				5					10					15	
Ser	Phe	Gln	Ala	Gly	Pro	Arg	Ala	Val	Gly	Leu	Gln	Arg	Pro	Ile	
		20					25				30				
Ile	Ser	Glu	His	Phe	Phe	Gln	Phe	Asp	Pro	Phe	Asp	Lys	Arg	His	Trp
		35				40					45				
Val	Val	Ser	His	His	Leu	Pro	His	Ala	Ala	Thr	Ala	Ala	Phe	Thr	Ser
		50				55				60					
Gly	Phe	Glu	Asp	Cys	Ala	Gly	Leu	Val	Ser	Asp	Thr	Ala	Gly	Ser	Asn
65					70				75					80	
Thr	Leu	Asp	Gly	Lys	Asp	Tyr	Val	Glu	Ser	Cys	Cys	Asn	Ala	Ile	Pro
			85					90						95	

<210> 1879

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 1879

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120
gtccctccca caggctctga cgcccgtctt gcggcttcgg tgtttgaaca ggccacagtc
180
caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtgga taagttgaag gaggccctga aaccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt ccttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaaacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gcccgcaga aagtgtttt cccacaggag cgactgtctc tgaggtggga gcggtcttc
 660
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 720
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 780
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 840
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 900
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 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagttg atcgtcaaac gcaggctact
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 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
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Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35				40						45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Ser	Arg	Lys	Ser	Lys	Tyr	Val	Leu	Leu
	50					55					60				
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65					70					75				80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90					95		
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
			100					105					110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
		115				120						125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130				135						140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

145		150		155		160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln						
	165		170		175	
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg						
	180		185		190	
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp						
	195		200		205	
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys						
	210		215		220	
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu						
225		230		235		240
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg						
	245		250			

<210> 1881

<211> 358

<212> DNA

<213> Homo sapiens

<400> 1881

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120
tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tgggtaagca
180
cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
240
ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
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358

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<210> 1882

<211> 115

<212> PRT

<213> Homo sapiens

<400> 1882

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	20		25		30									
Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu														
	35		40		45									
Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln														
	50		55		60									
Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile														
65		70		75		80								
Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu														
	85		90		95									
Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro														
	100		105		110									
Ile Arg Arg														

115

<210> 1883
<211> 367
<212> DNA
<213> Homo sapiens

<400> 1883
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120
tgctgaaggc gatgagtctg tatttgtcaa ctccaattca aacagctcga tgggtgcctcc
180
tgtcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
240
gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
300
atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccatcgctgg
360
cgatttn
367

<210> 1884
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1884
Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
1 5 10 15
Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
20 25 30
Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
35 40 45
Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
50 55 60
Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
65 70 75 80
Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
85 90 95
Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
100 105 110
Met Pro Ile Ala Gly Asp Xaa
115

<210> 1885
<211> 392
<212> DNA
<213> Homo sapiens

<400> 1885
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 120
 ctgcgtagta cagctgctgt tgccgccggg gccgcgaccg gtaccggggtt ccaaccactg
 180
 aactggtgga tcctcgtcat tcccgggtctc gctgcgctca tcctgctggt gcgcaacgcc
 240
 actggtcggg ccgcggcagg actgggggtat ctcttcggca tcgggtctgtt taccaccacc
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 360
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 392

<210> 1886

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1886

Xaa	Ala	Tyr	Ser	Gln	Arg	Met	Ser	Leu	Arg	His	Arg	Asp	Ser	Arg	Arg
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Pro	Arg	His	His	Val	Arg	Arg	Ser	Arg	His	Val	Gly	Asn	Pro	Val	Ile
			20					25					30		
Ser	Arg	Leu	Arg	Arg	Thr	Ser	Trp	Leu	Arg	Ser	Thr	Ala	Ala	Val	Ala
		35					40					45			
Ala	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Phe	Gln	Pro	Leu	Asn	Trp	Trp	Ile
	50					55					60				
Leu	Val	Ile	Pro	Gly	Leu	Ala	Ala	Leu	Ile	Leu	Leu	Val	Arg	Asn	Ala
65					70					75				80	
Thr	Gly	Arg	Ala	Ala	Gly	Leu	Gly	Tyr	Leu	Phe	Gly	Ile	Gly	Leu	
			85					90					95		
Phe	Thr	Thr	Thr	Ile	Ser	Trp	Val	Gly	Val	Ile	Gly	Pro	Pro	Val	Ala
			100					105					110		
Ile	Leu	Leu	Ile	Ala	Val	Met	Ala	Leu	Trp	Cys	Leu	Leu	Ala	Gly	Trp
		115					120						125		
Thr	Ile														
	130														

<210> 1887

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1887

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 180
 ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
 240
 ggtctgcccc aggacatcgt ctggcgctcag cccttcccgg gcccggggct ggctatccgc
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attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
 360
 cgt
 363

<210> 1888
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1888
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 20 25 30
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 1889
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 120
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 180
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 240
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 300
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 360
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 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggttcccc
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 530

<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
 1 5 10 15
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
 20 25 30
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
 35 40 45
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
 50 55 60
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
 65 70 75 80
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
 85 90 95
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
 100 105 110
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
 115 120 125
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
 130 135 140
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
 145 150 155 160
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
 165 170 175

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891
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 120
 cgtcaattta cagaggcagc ccagcttcct atcaactttc tggcctgggt taacgggtgta
 180
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 300
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 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
          20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
          35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
          50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
          65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
          85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
          100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
          115          120

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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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180
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840

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<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp
			35				40					45			
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
	50				55						60				
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75				80	
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
				85					90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
		115				120					125				
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
	130					135					140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145				150					155					160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
			165					170					175		
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
			180					185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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2040

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 2220
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 2280
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 2340
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 2400
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa
 2555

<210> 1896
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1896
 Cys Glu Gln Cys Gly Lys Cys Lys Cys Gly Glu Cys Thr Ala Pro Arg
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 Thr Leu Pro Ser Cys Leu Ala Cys Asn Arg Gln Cys Leu Cys Ser Ala
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 Glu Ser Met Val Glu Tyr Gly Thr Cys Met Cys Leu Val Lys Gly Ile
 35 40 45
 Phe Tyr His Cys Ser Asn Asp Asp Glu Gly Asp Ser Tyr Ser Asp Asn
 50 55 60
 Pro Cys Ser Cys Ser Gln Ser His Cys Cys Ser Arg Tyr Leu Cys Met
 65 70 75 80
 Gly Ala Met Ser Leu Phe Leu Pro Cys Leu Leu Cys Tyr Pro Pro Ala
 85 90 95
 Lys Gly Cys Leu Lys Leu Cys Arg Arg Cys Tyr Asp Trp Ile His Arg
 100 105 110
 Pro Gly Cys Arg Cys Lys Asn Ser Asn Thr Val Tyr Cys Lys Leu Glu
 115 120 125
 Ser Cys Pro Ser Arg Gly Gln Gly Lys Pro Ser
 130 135

<210> 1897
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 1897
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 gtctacagtc acactggcga gaagcccttc cactgcactg actgcggcaa gggcttcggc
 120

cacgcttcct ccctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt
 180
 ctggagtgtg gccgggcctt cacgcagcgc tcggcgctga cttcgcacct gcgcgtccac
 240
 accggcgaga aaccctatgg ctgcgccgac tgtggccgcc gcttcagcca gagctctgcc
 300
 ctctaccagc accggcgcgt gcacagcggc gagacccccct tccccctgccc ggactgtggc
 360
 cgcgccttcg cctacccctc ggacctgcgg cgccacgtgc gcatccacac gggcgagaag
 420
 ccctaccctt gccagactg tgggcgcgc ttttcctcct cctccctgct ggtcagtcac
 480
 cggcgggcac actccggcga gtgccctat gtttgtgacc agtgtggcaa acgtttctcc
 540
 cagcgcaaga acctctccca gcaccaggtc atccatacag gggagaagcc ctatcactgc
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 cctgactgtg gtcgctgctt ccggaggagc cggtccttgg ccaatcacccg gaccacacac
 660
 acaggtgaaa aaccccacca gtgccctagc tgtggacgtc gcttcgccta cccctccctg
 720
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 780
 aagcgttttg ctgagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag
 840
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca
 900
 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 1898
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 Leu Val Glu His Val Tyr Ser His Thr Gly Glu Lys Pro Phe His Cys
 20 25 30
 Thr Asp Cys Gly Lys Gly Phe Gly His Ala Ser Ser Leu Ser Lys His
 35 40 45
 Arg Ala Ile His Arg Gly Glu Arg Pro His Arg Cys Leu Glu Cys Gly
 50 55 60
 Arg Ala Phe Thr Gln Arg Ser Ala Leu Thr Ser His Leu Arg Val His
 65 70 75 80
 Thr Gly Glu Lys Pro Tyr Gly Cys Ala Asp Cys Gly Arg Arg Phe Ser
 85 90 95
 Gln Ser Ser Ala Leu Tyr Gln His Arg Arg Val His Ser Gly Glu Thr
 100 105 110
 Pro Phe Pro Cys Pro Asp Cys Gly Arg Ala Phe Ala Tyr Pro Ser Asp
 115 120 125
 Leu Arg Arg His Val Arg Ile His Thr Gly Glu Lys Pro Tyr Pro Cys
 130 135 140
 Pro Asp Cys Gly Arg Arg Phe Ser Ser Ser Ser Leu Leu Val Ser His

145					150					155					160
Arg	Arg	Ala	His	Ser	Gly	Glu	Cys	Pro	Tyr	Val	Cys	Asp	Gln	Cys	Gly
				165					170					175	
Lys	Arg	Phe	Ser	Gln	Arg	Lys	Asn	Leu	Ser	Gln	His	Gln	Val	Ile	His
			180					185					190		
Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Pro	Asp	Cys	Gly	Arg	Cys	Phe	Arg
	195						200					205			
Arg	Ser	Arg	Ser	Leu	Ala	Asn	His	Arg	Thr	Thr	His	Thr	Gly	Glu	Lys
	210					215					220				
Pro	His	Gln	Cys	Pro	Ser	Cys	Gly	Arg	Arg	Phe	Ala	Tyr	Pro	Ser	Leu
225					230					235					240
Leu	Ala	Ser	His	Arg	Arg	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Ala	Cys
				245					250					255	
Asp	Leu	Cys	Ser	Lys	Arg	Phe	Ala	Gln	Trp	Ser	His	Leu	Ala	Gln	His
			260					265					270		
Gln	Leu	Leu	His	Thr	Gly	Glu	Lys	Pro	Phe	Pro	Cys	Leu	Glu	Cys	Gly
	275						280					285			
Arg	Ala	Ser	Ala	Arg	Gly	Gly	Leu	Trp	Leu	Ser	Thr	Ser	Val	Ala	Pro
	290					295					300				
Arg	Pro	Gln	Thr	Val	Ala	Leu	Asp								
305					310										

<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

aaatttgccct ccctaattgg caaggtgcaa gccctggaac agcgcgacca gctgctggag

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acacgctgga gcttcctgca gggccaggac tcagccatct tcgacctcgg gcatctctat

120

gaggaaatat caggccggct gcggaggga ctggggccaaa gggacaggaa ccggggggcag

180

ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga

240

gatgagatct ccaagcgac agacatggag ttcacctttg ttcagctgaa gaaggacctg

300

gatgcagagt gtcttcatcg gactgaactg gaaaccaagt taaaaagcct ggagagcttc

360

gtggagttga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag

420

gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg

480

gaggaggtga aggcccagta tgacgccg

508

<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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1           5           10           15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20           25           30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35           40           45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50           55           60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
65           70           75

```

<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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acgcgtggac cacgatgcgc cggatcgggc tcggcgccat gcacacctcg gacctggcgg
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cgggtgttcgg cgatgcgaag gcaaccgcgc cttccaagtt cgacccttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcatccggg cgagaagtgg ccggtctacg gtttcgcgag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtcctcgc tggagtacga cccaaggcg gcgcagcgcc
300
gcgcgtggga gggctttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

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<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

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Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
1           5           10           15
Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20           25           30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35           40           45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50           55           60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
65           70           75           80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85           90           95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100          105          110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

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      115              120              125
Arg Ala Thr Leu Ser Asp Ala Ser Ala Thr Glu Phe Arg Glu Met Lys
      130              135              140
Glu Ile Leu Ile Glu Gly Gly
145              150

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<210> 1903
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1903
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 gacttgtcta cgccgctggc ccagttccgc gaggacatca cgtggaggcg gccccagaga
 120
 atttgtgcca acccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
 180
 ctgctggggg attgctgggt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc
 240
 ctggaccagg tcattcctgc gggacagccg agctggggccg accaggagta cgggggctcc
 300
 ttcacctgtc gcttttggca gtttggacgg tgggtggagg gtccatgggt cccttcgagc
 360
 ccctgtgggc ggggcaggtg gcggatgccc tgggtggacct gaccggcggc ctggcagaaa
 420
 gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
 480
 agcacaggac ttgtcggcag ctgctccacc tgaaggacca gtgtctgatc a
 531

<210> 1904
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 1904
 Pro Ala Arg Glu Leu Phe Arg Asp Ala Ala Phe Pro Ala Ala Asp Ser
 1 5 10 15
 Ser Leu Phe Cys Asp Leu Ser Thr Pro Leu Ala Gln Phe Arg Glu Asp
 20 25 30
 Ile Thr Trp Arg Arg Pro Gln Arg Ile Cys Ala Asn Pro Arg Leu Phe
 35 40 45
 Pro Asn Asp Gln Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp
 50 55 60
 Cys Trp Phe Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu
 65 70 75 80
 Leu Asp Gln Val Ile Pro Ala Gly Gln Pro Ser Trp Ala Asp Gln Glu
 85 90 95
 Tyr Arg Gly Ser Phe Thr Cys Arg Phe Trp Gln Phe Gly Arg Trp Val
 100 105 110
 Glu Gly Pro Trp Val Pro Ser Ser Pro Cys Gly Arg Gly Arg Trp Arg
 115 120 125
 Met Pro Trp Trp Thr

130

<210> 1905
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1905
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 60
 ctggccatga gccggatcct cgcgcgcttt tcggtcctgc ggggtgctgct ggccagtttc
 120
 ctcttgggcg ccgtgcgctg gttgctgctg ggcgcgttgg ccgatcacct ggcgggtgctg
 180
 ttgttcgccc aggtgctgca cgcggcgacc tttgccagct ttcacgcctc tgccattcat
 240
 ttcgtgcaac gtagcttcgg cgcgcgcncg gcaaggccag ggcaggcggt atacgctgca
 300
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 360
 gggccgacct ggactttcag catcggt
 387

<210> 1906
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1906
 Thr Arg Gly Leu Ile Gly Met Leu Trp Ala Leu Gly Val Val Ala Glu
 1 5 10 15
 Val Leu Met Phe Leu Ala Met Ser Arg Ile Leu Ala Arg Phe Ser Val
 20 25 30
 Arg Arg Val Leu Leu Ala Ser Phe Leu Leu Ala Ala Val Arg Trp Leu
 35 40 45
 Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
 50 55 60
 Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
 65 70 75 80
 Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
 85 90 95
 Leu Tyr Ala Ala Leu Ala Gly Thr Gly Gly Ala Leu Gly Ala Leu Tyr
 100 105 110
 Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
 115 120 125
 Val

<210> 1907
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1907

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 aagctgcgcg ccgcgcgccg cgaaacgctc gagatgtgcg tcaacgacct gttccccggc
 120
 ggccggcgaca cgtcgaaggc cacgtttctgg acgggcctgc gcccgatgac gccggacggc
 180
 acgccgatcg tcggccgcac gccgggtgtcg aacctgttcc tgaacaccgg ccacggcacg
 240
 ctcggctgga caatggtgtg cggctcgggc caactgtctg ccgacctgat ctcgggcaag
 300
 atgcccgcga tccaggccga cgacctgtct nnc
 333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

Thr	Arg	Phe	Asp	Gln	Arg	Ile	Arg	Val	Gly	Gly	Met	Ala	Glu	Ile	Val
1				5					10					15	
Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr
		35					40					45			
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50					55				60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65				70					75					80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
			85					90						95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
			100					105						110	

<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

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 120
 actccggagg agctggcagc cctctttgcg ccctacggca cggcatgag ctgcgccgtc
 180
 atgaaacagt tcgccttcgt gcacatgcgc gagaacgcgg gcgcgctgcg cgccatcgaa
 240
 gccctgcacg gccacgagct gcggccgggg gcgcgctcg tgggtggaaat gtcgcgcca
 300
 aggctcttta atacttgaa gattttcgtg ggcaatgtgt cggctgcatg cacgagccag
 360
 gaactgcgca gcctcttcga gcgcgcgga cgcgtcatcg agtgtgacgt ggtgaaagac
 420

tacgcgtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac
480
ggcaaagaag tgaagggcaa gcgcatacaac gtggaactct ccaccaaggg tcagaagaag
540
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600
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660
agcactggtg gctttgatgg gcaagcccgt cagcccacac cacccttctt tggtcgcgac
720
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840
tctgcctctt tgggtgttgg ctatcggact cagcccatga cagcccaggc agcctcttac
900
cgcgctcagc cctctgtctc ccttggggca ccatacaggg gccagctggc tagtcctagc
960
tcccagtctg ctgcagcttc ttaactcggc ccatatggtg gagcccagcc ctacagcctcg
1020
gccctttcct cctatggggg tcaggcagct gcagcttctt cgctcaactc ctatggggct
1080
cagggttctt cccttgctc ctatggtaac cagccatcct cttacggcgc ccaggctgcc
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1320
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1620
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1680
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1740
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1860
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1920
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1980
gattaccgtc gcctgcccga tgcccattcc gattacgcac gctattcggg ctctataat
2040

gattacctgc gggcgggtca gatgcactct ggctaccagc gccgcatgta gggccatcct
 2100
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 2160
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 2280
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 2340
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 2460
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 2520
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 2580
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 2640
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 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

Met	Lys	Ile	Phe	Val	Gly	Asn	Val	Asp	Gly	Ala	Asp	Thr	Thr	Pro	Glu
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Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
			20					25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65					70					75				80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85						90					95	
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
		100					105						110		
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
	115					120					125				
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130				135						140				
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145				150					155					160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

165 170 175
 Gly Thr Gly Gly Phe Ser Ala Thr Phe Asp Tyr Gln Gln Ala Phe Gly
 180 185 190
 Asn Ser Thr Gly Gly Phe Asp Gly Gln Ala Arg Gln Pro Thr Pro Pro
 195 200 205
 Phe Phe Gly Arg Asp Arg Ser Pro Leu Arg Arg Ser Pro Pro Arg Ala
 210 215 220
 Ser Tyr Val Ala Pro Leu Thr Ala Gln Pro Ala Thr Tyr Arg Ala Gln
 225 230 235 240
 Pro Ser Val Ser Leu Gly Ala Ala Tyr Arg Ala Gln Pro Ser Ala Ser
 245 250 255
 Leu Gly Val Gly Tyr Arg Thr Gln Pro Met Thr Ala Gln Ala Ala Ser
 260 265 270
 Tyr Arg Ala Gln Pro Ser Val Ser Leu Gly Ala Pro Tyr Arg Gly Gln
 275 280 285
 Leu Ala Ser Pro Ser Ser Gln Ser Ala Ala Ala Ser Ser Leu Gly Pro
 290 295 300
 Tyr Gly Gly Ala Gln Pro Ser Ala Ser Ala Leu Ser Ser Tyr Gly Gly
 305 310 315 320
 Gln Ala Ala Ala Ala Ser Ser Leu Asn Ser Tyr Gly Ala Gln Gly Ser
 325 330 335
 Ser Leu Ala Ser Tyr Gly Asn Gln Pro Ser Ser Tyr Gly Ala Gln Ala
 340 345 350
 Ala Ser Ser Tyr Gly Val Arg Ala Ala Ala Ser Ser Tyr Asn Thr Gln
 355 360 365
 Gly Ala Ala Ser Ser Leu Gly Ser Tyr Gly Ala Gln Ala Ala Ser Tyr
 370 375 380
 Gly Ala Gln Ser Ala Ala Ser Ser Leu Ala Tyr Gly Ala Gln Ala Ala
 385 390 395 400
 Ser Tyr Asn Ala Gln Pro Ser Ala Ser Tyr Asn Ala Gln Ser Ala Pro
 405 410 415
 Tyr Ala Ala Gln Gln Ala Ala Ser Tyr Ser Ser Gln Pro Ala Ala Tyr
 420 425 430
 Val Ala Gln Pro Ala Thr Ala Ala Ala Tyr Ala Ser Gln Pro Ala Ala
 435 440 445
 Tyr Ala Ala Gln Ala Thr Thr Pro Met Ala Gly Ser Tyr Gly Ala Gln
 450 455 460
 Pro Val Val Gln Thr Gln Leu Asn Ser Tyr Gly Ala Gln Ala Ser Met
 465 470 475 480
 Gly Leu Ser Gly Ser Tyr Gly Ala Gln Ser Ala Ala Ala Ala Thr Gly
 485 490 495
 Ser Tyr Gly Ala Ala Ala Tyr Gly Ala Gln Pro Ser Ala Thr Leu
 500 505 510
 Ala Ala Pro Tyr Arg Thr Gln Ser Ser Ala Ser Leu Ala Ala Ser Tyr
 515 520 525
 Ala Ala Gln Gln His Pro Gln Ala Ala Ala Ser Tyr Arg Gly Gln Pro
 530 535 540
 Gly Asn Ala Tyr Asp Gly Ala Gly Gln Pro Ser Ala Ala Tyr Leu Ser
 545 550 555 560
 Met Ser Gln Gly Ala Val Ala Asn Ala Asn Ser Thr Pro Pro Pro Tyr
 565 570 575
 Glu Arg Thr Arg Leu Ser Pro Pro Arg Ala Ser Tyr Asp Asp Pro Tyr
 580 585 590
 Lys Lys Ala Val Ala Met Ser Lys Arg Tyr Gly Ser Asp Arg Arg Leu


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      595              600              605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe
      610              615              620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp
625              630              635              640
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu
      645              650              655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met
      660              665

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<210> 1911
 <211> 339
 <212> DNA
 <213> Homo sapiens

```

<400> 1911
ncggggtggc cggaatctac tcctagtgtc cagcttccct cctcttctgt ctttcctcg
60
ggtgcgcgga tgcgtttgcg cccctgctg cgttccgacg gtcattgagtg gcggcgctcag
120
cgcatcgacg atgaaagctt cctccgcca gttgagccga cccaagccgc accgtgggagc
180
gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt
240
gaagcactgg tgggtcccgt cgtcattgag gtggagggga aattcgcagg gcaggtaacc
300
ctgggaaaca ttcagcatgg cagcattcgc gattgctgg
339

```

<210> 1912
 <211> 113
 <212> PRT
 <213> Homo sapiens

```

<400> 1912
Xaa Gly Trp Pro Glu Ser Thr Pro Ser Val Gln Leu Pro Ser Ser Ser
1      5      10      15
Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser
20     25     30
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu
35     40     45
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser
50     55     60
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg
65     70     75     80
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala
85     90     95
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys
100    105    110
Trp

```

<210> 1913
 <211> 767

<212> DNA

<213> Homo sapiens

<400> 1913

gtgcacaccg gttcacagcg atatttcagg caaattgaaa gcgtcagttc gataggctga
60
atgcgaaatg ggggatttgt caccctcagg gaccggaagg aaggagcag tccgatggca
120
gcgccagtac tcgatctcgt cctcccagcc ttgtccgaaa cctccgccaa tctcatcggc
180
cagaggttgc gccagggatg tcacacctcc atccccacat cgaatctacg gtgagcttcg
240
tcccagctgt cgggcagtac aaggcacctc ggatcaagct ttcttggcgt gaactgggtcc
300
tggtacccat caatgccacc cacctgcact ccaatcccc acaagttgtc caacacgccg
360
cagaattgcy tcgcagccac ccggaccttg ccatcaaggt ggcccgcgcc accggaccag
420
caccggctct cctcaacctc gtcgatacgc gattgctctt ggcagctcat cgcgtccatg
480
cccaggagct ggactcactc gtattgtctt cccctgatgg cggcgattta cgtggctcgg
540
caatgctgtc caggctgacc cggctgtggt cccagcacca ccaccttccg gtccgcacgt
600
ccaccaatcg tgggtggggct actgcggctc aggaggtcgt cgcgcgcctg cgacaggagg
660
ggcgccgtca tatcgagtg ggaagcctgt ggatttgca cgacgagaat ttccgcattc
720
atactcgcca ggctttgcat gccggtgccg aggttgtcgc cgcaccg
767

<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

Met	Ser	His	Leu	His	Pro	His	Ile	Glu	Ser	Thr	Val	Ser	Phe	Val	Pro
1			5					10					15		
Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
			20					25					30		
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
			35				40					45			
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
			50			55				60					
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65					70				75					80	
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
				85				90					95		
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
			100				105						110		
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
			115				120						125		
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val

130		135		140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala				
145		150		155
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr				160
	165		170	175
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro				
180		185		190

<210> 1915
 <211> 571
 <212> DNA
 <213> Homo sapiens

<400> 1915
 acgcgtccca ggccccacag gccccctctg gctctcaggc cccccgcca gtggccagga
 60
 aggtgtgagc gcacgatggg cagtcacgcc gcacacacgc tctgctcatg tccctcccca
 120
 ggaccctctg accgggcaca agggcagctg tgaggacaag gccacagcca caaaccaacc
 180
 tggcacacac ggctcagggc gaggcactgc cccatggggc tgcattgatcc acgtcacag
 240
 gtgtcattgt ctatgctcag gggggcttgg caccatggga aaccaccca gaacacatgg
 300
 agaagccaca gcacaacctc agcgcccgcc atgcaggacc ctgggtctca cccattgcac
 360
 ccaccgtgcg ggacccctgc gcctcaccgc gaacatccac agtgtgggac tgctgcgtct
 420
 caccactgc acctgccgtg caggatccct gagtctcacc cgccgcaccc gccgtgcggg
 480
 atccctgagt ctacccgcc gcaccgccg tacctgccgc atccgccatg cgggaccct
 540
 gcgtctcacc caccgcaccc gccgtgcggg a
 571

<210> 1916
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1916
 Met Gly Leu His Asp Pro Arg Ser Gln Val Ser Leu Ser Met Leu Arg
 1 5 10 15
 Gly Ala Trp His His Gly Lys Pro Thr Gln Asn Thr Trp Arg Ser His
 20 25 30
 Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
 35 40 45
 His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
 50 55 60
 Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
 65 70 75 80
 Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
 85 90 95
 His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

100
Pro Pro His Pro Pro Cys Gly
115

105

110

<210> 1917
<211> 360
<212> DNA
<213> Homo sapiens

<400> 1917
nnacgcgtga ccggcgaaga tctccgcacc ctatctgccg ggtacacgcc ggggtgattcc
60
gatatgtctt gggctgccat caccttgtgg cgcggtgtcg ttgcctccgc cttggaccgt
120
catccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg
180
gatttcgccg ccggatggtt gctcgaccgc ttggcagttc ccgtacatcg cacagtggcc
240
gactcccca aa ggagacactt cccggtgact catttgagc tcaatcggga gacaaccac
300
gtagacgtcg atgtcattga cgagcgcacg gttcgtgtat gtgttcggg ttcgccgga
360

<210> 1918
<211> 120
<212> PRT
<213> Homo sapiens

<400> 1918
Xaa Arg Val Thr Gly Glu Asp Leu Arg Thr Leu Ser Ala Gly Tyr Thr
1 5 10 15
Pro Gly Asp Ser Asp Met Ser Trp Ala Ala Ile Thr Leu Trp Arg Gly
20 25 30
Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
35 40 45
Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
50 55 60
Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
65 70 75 80
Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
85 90 95
Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
100 105 110
Val Cys Val Pro Gly Ser Pro Glu
115 120

<210> 1919
<211> 354
<212> DNA
<213> Homo sapiens

<400> 1919
nncggccgca gctgtgtcca ctgcgctgtc cctgccacct cggccatctg cctctctctt
60

ccaggctgca gccatccctc ctgcactgct gaggcctggc cacgcgcac cncggccacgc
 120
 ccacctccat cctctttgcc ccttactaaa cactggggagc ccgcccggcc gcgacaggcc
 180
 aggccagcgg gaaggtgtag acgaacagcc caaaggattc agcagtgtaa gtaccccacc
 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
 300
 agctcgcggg caccgtatca tcccgtgccg tctccacct acccctgcc attg
 354

<210> 1920
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1920
 Xaa Gly Arg Ser Cys Val His Cys Ala Val Pro Ala Thr Ser Ala Ile
 1 5 10 15
 Cys Leu Ser Leu Pro Gly Cys Ser His Pro Ser Cys Thr Ala Glu Ala
 20 25 30
 Trp Pro Arg Ala Ser Arg Pro Arg Pro Pro Pro Ser Ser Leu Pro Leu
 35 40 45
 Thr Lys His Trp Glu Pro Ala Arg Pro Arg Gln Ala Arg Pro Ala Gly
 50 55 60
 Arg Cys Arg Arg Thr Ala Gln Arg Ile Gln Gln Cys Lys Tyr Pro Thr
 65 70 75 80
 Tyr Ala Leu Thr Lys Cys Arg Pro Pro Pro Ser Pro Thr Ser Arg His
 85 90 95
 Arg Arg Arg Pro Ser Ser Arg Ala Pro Tyr His Pro Val Pro Ser Pro
 100 105 110
 Pro Tyr Pro Cys Gln Leu
 115

<210> 1921
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1921
 gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
 60
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagccgt gggcagacct gggagcccag ctctctctgg ttccaccctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct ccagatgac
 300
 ttcattgtggg gacaggagaa ctacagatca tggctgagaa gggcgcngtg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1 5 10 15
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
 20 25 30
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
 35 40 45
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
 50 55 60
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
 65 70 75 80
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
 85 90

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923
 nattnaatta tgggtgagaaa aggccttatgc gttgcattgc tcgtgcttgt cacactgtca
 60
 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc
 120
 cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc
 180
 ccgttgccctt taaacggacg tatcttaaatt gacttttatt ggaaggcaca ggcccaattc
 240
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
 300
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgttttgaa
 360
 aatcccag
 368

<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1 5 10 15
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
 20 25 30
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
 35 40 45
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
 50 55 60
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn

```

65          70          75          80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
      85          90          95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
      100        105        110
Pro Phe Thr Phe Glu Asn Pro
      115

```

<210> 1925
 <211> 427
 <212> DNA
 <213> Homo sapiens

```

<400> 1925
actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaaccca gtgtggcaag
60
ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgcccc
120
gggctcccc caggctgtga gcagataaag ccctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtca caccagatgt ggcagcccct
240
ccacgccagg ctgtgtggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct gggttccttag agcaaattga agcaccaggc tctggtgcac
420
ggcgcgc
427

```

<210> 1926
 <211> 104
 <212> PRT
 <213> Homo sapiens

```

<400> 1926
Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
1      5      10      15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
      20      25      30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
      35      40      45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
      50      55      60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65      70      75      80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
      85      90      95
Asn Arg Cys Leu Leu Glu Thr Leu
      100

```

<210> 1927
 <211> 516

<212> DNA

<213> Homo sapiens

<400> 1927

```

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcataaa
60
acatctgctt tgacggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
120
ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagaggttcc
180
gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
240
accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
300
ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcactcaaga agaccacaaa
360
atggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
420
acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
480
acttacgagg aggccaaagc acagcccttc acgcgt
516

```

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

```

Xaa Leu Glu Asp Ser Thr Tyr Phe Ser Pro Asp Phe Gln Leu Tyr Ser
1           5           10           15
Gly Arg His Glu Thr Ser Ala Leu Thr Val Glu Ala Thr Ser Ser Ile
20           25           30
Arg Glu Lys Val Val Glu Asp Pro Leu Cys Asn Phe His Ser Pro Asn
35           40           45
Phe Leu Arg Ile Ser Glu Val Glu Met Arg Gly Ser Glu Asp Ala Ala
50           55           60
Ala Gly Thr Val Leu Gln Arg Leu Ile Gln Glu Gln Leu Arg Tyr Gly
65           70           75           80
Thr Pro Thr Glu Asn Met Asn Leu Leu Ala Ile Gln His Gln Ala Thr
85           90           95
Gly Ser Ala Gly Pro Ala His Pro Thr Asn Asn Phe Ser Ser Thr Glu
100          105          110
Asn Leu Thr Gln Glu Asp Pro Gln Met Val Tyr Gln Ser Ala Arg Gln
115          120          125
Glu Pro Gln Gly Gln Glu His Gln Xaa Gly Xaa Asn Thr Val Met Glu
130          135          140
Lys Gln Val Arg Ser Thr Gln Pro Gln Gln Asn Asn Glu Glu Leu Pro
145          150          155          160
Thr Tyr Glu Glu Ala Lys Ala Gln Pro Phe Thr Arg
165          170

```

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

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nnccgcgag actcagggtc tgggggtccct cttccccaag aggcctgact gcctgggtgt
60
tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc agggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacggggccc ctgagtecca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcaccttg cttggattcc
360
tcattttct ttttcttctt ggccccactc tcctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccattgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttgggtgg cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgtctgagc agtctcagtc tctccctcct gccaaagccgc cagggtccca ccctcaggct
600
ccctggtagg gaccgagggg cccggcgctt gagccccgct caatcgccgc tttcgttgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctgatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtac tcagtcattg tgcccacctc ccaggacctt gagcaggaca
840
caa
843

```

<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

```

Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1      5      10      15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20     25     30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35     40     45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50     55     60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65     70     75     80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85     90     95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

```

100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120

<210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 1931
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca
 60
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact
 120
 gaagaggagg tggtagtggt tgtcagaagc tgctgagaag ccagtttagat aaagcggaga
 180
 agcttcctac taggacagct tcctcccagc ccagtgtggc cacgctggtg tcctcgggtga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcgggctc
 300
 acgaggctga ctttggaaac aggaggtccg tgggtcgtgg aataagaaag ggcacatcatg
 360
 ttgcagagga agggaaggaa gccacaggct gccttgggga gctttctgaa aggcaggtct
 420
 gatcatgcct ctctgggcta cgggtctctc acgggtggctc ctgggttgga ctgaagtggg
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg ggggccccag
 540
 cagggtctgc cccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagcgtcgcc ctcttcaggg agcctttcat aaccacctct cccttccact ggctaaagat
 660
 gaggttgagc aactgcagga cttgggacct tgttcttgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933
 <211> 295
 <212> DNA
 <213> Homo sapiens .

<400> 1933
 ggcgccgagc tgtggggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
 60
 atgctgccgg gggataacgg cctcttctgtg tgccagcgcc tgcgccagca atacgcaaca
 120
 ccagtgatca tgctgaccgc catggggcgaa ctgagtgatc gcgtggggggg cctggaaatg
 180
 ggcgccgatg actacctgaa caaacctttc gatgcccggtg aattacttgc ccgggtgcgc
 240
 gctgtactgc gtccggcggtg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
 295

<210> 1934
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1934
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile
 1 5 10 15
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
 20 25 30
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
 35 40 45
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
 50 55 60
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
 65 70 75 80
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
 85 90 95
 Ser Arg

<210> 1935
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 1935
 accggtgtgg cgggcgcggc cttcaccacc atcggtcca ccgggccgac ggcggttcg
 60
 caatacatcg tcgatacctt cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
 120
 cccatgcct cggcgttcgt gattgccag acccaatcgc tgctcgagtt tttcctcagt
 180
 ggctcgatgg ccaaggtgct gaccttctcg tcggtgattc tgatcctgat gctgcgccg
 240

caaggggtgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg tttaagca
298

<210> 1936

<211> 90

<212> PRT

<213> Homo sapiens

<400> 1936

Thr	Gly	Val	Ala	Gly	Ala	Ala	Phe	Thr	Thr	Ile	Gly	Ser	Thr	Gly	Pro
1				5					10					15	
Thr	Ala	Gly	Ser	Gln	Tyr	Ile	Val	Asp	Thr	Phe	Leu	Val	Val	Val	Phe
			20					25					30		
Gly	Gly	Ala	Gln	Ser	Leu	Phe	Gly	Pro	Ile	Ala	Ser	Ala	Phe	Val	Ile
		35					40					45			
Ala	Gln	Thr	Gln	Ser	Leu	Ser	Glu	Phe	Phe	Leu	Ser	Gly	Ser	Met	Ala
	50					55					60				
Lys	Val	Leu	Thr	Leu	Ser	Ser	Val	Ile	Leu	Ile	Leu	Met	Leu	Arg	Pro
65					70				75					80	
Gln	Gly	Leu	Phe	Ser	Ile	Lys	Val	Arg	Lys						
				85					90						

<210> 1937

<211> 513

<212> DNA

<213> Homo sapiens

<400> 1937

gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa
60
gcctttaatt ctcccaattt atttcaaatt catcaaagaa ctcacactgg aaagaggtcc
120
tataaatgta gggaaatagt gagagccttc acagttttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaaatact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tgttagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtgga ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtcccttcac gcg
513

<210> 1938

<211> 171

<212> PRT

<213> Homo sapiens

<400> 1938

Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

1	5	10	15
Val Cys Gly Lys Ala Phe Asn Ser Pro Asn Leu Phe Gln Ile His Gln			
	20	25	30
Arg Thr His Thr Gly Lys Arg Ser Tyr Lys Cys Arg Glu Ile Val Arg			
	35	40	45
Ala Phe Thr Val Ser Ser Phe Phe Arg Lys His Gly Lys Met His Thr			
	50	55	60
Gly Glu Lys Arg Tyr Glu Cys Lys Tyr Cys Gly Lys Pro Ile Asp Tyr			
65	70	75	80
Pro Ser Leu Phe Gln Ile His Val Arg Thr His Ser Gly Glu Lys Pro			
	85	90	95
Tyr Lys Cys Lys Gln Cys Gly Lys Ala Phe Ile Ser Ala Gly Tyr Val			
	100	105	110
Arg Thr His Glu Ile Arg Ser His Ala Leu Glu Lys Ser His Gln Cys			
	115	120	125
Gln Glu Cys Gly Lys Lys Leu Ser Cys Ser Ser Ser Leu His Arg His			
	130	135	140
Glu Arg Thr His Ser Gly Gly Lys Leu Tyr Glu Cys Gln Lys Cys Asp			
145	150	155	160
Gln Val Phe Arg Cys Pro Thr Ser Leu His Ala			
	165	170	

<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg ccgctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
60
aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgaggggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta ggttatatct taagtgtggt gctgctaaca ttgccaggc
300
agcatctggt tcagctttat ctatattttt tgactgctct gctcctctat gctggacatc
360
aaatttccag ggactatggt cggagtgaac tggggtttgc ctatgagggg ccaatgtatt
420
tagaacctct ctctatgaat cggtttacca cagccttaat aggtcagttg gtggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggtt gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataacettgc taaatctgca tacagagaat tgggttcagg agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tggtcttttc atggttttct
780

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ggctcgtctt atttgcctt cagatttact cctatttcag tactcgagat cagcctgcat
 840
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 tatcgttcat gttacacaac ttcgtatttt gttaagatag gatttttcatt cactggatac
 1020
 ctaggtttgg caatgcagag aggtgctaac ataataatgt gggtttatttg gctgcactat
 1080
 ggaccagagt gtagcaaag atttgtggaa aggtacatag cacatcgtaa aagtattttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaatgta ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1			5						10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
		35					40					45			
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
		50				55					60				
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
65					70					75				80	
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
			85						90					95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
			100					105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
		115					120					125			
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
		130				135					140				
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
145					150					155				160	
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
			165					170						175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
		180						185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
		195					200					205			
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
		210				215					220				
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
225					230					235				240	
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

```
Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg      250  
                260                      265                        255
```

<210> 1941
<211> 411
<212> DNA
<213> Homo sapiens

<400> 1941
ctgggaggccct gccccacagc atcatgatgg ggaaactccc cctgggggtc gtctcccctt
60
atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
120
gcacagccta cggtcgggag gatttcaagc ccctgtgtggg cagtacgta ggcaccggct
180
acaaatcaaa tttccagccc gtgggtctcat gccaaagccag tctggaggcc ttagacaacc
240
cggccagggg ggaacaagcc caggaccatt tcagtcctgt ggccagccag agctaccgcc
300
ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
360
gctatgggcy ggagaagccc agtgcggggc cccccacca ggagggtccgy a
411

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<210> 1942
<211> 129
<212> PRT
<213> Homo sapiens
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<400> 1942															
Met	Met	Gly	Lys	Leu	Pro	Leu	Gly	Val	Val	Ser	Pro	Tyr	Val	Lys	Met
1				5					10					15	
Ser	Ser	Gly	Gly	Tyr	Thr	Asp	Pro	Leu	Lys	Phe	Tyr	Ala	Thr	Ser	Tyr
			20					25					30		
Cys	Thr	Ala	Tyr	Gly	Arg	Glu	Asp	Phe	Lys	Pro	Arg	Val	Gly	Ser	His
		35					40					45			
Val	Gly	Thr	Gly	Tyr	Lys	Ser	Asn	Phe	Gln	Pro	Val	Val	Ser	Cys	Gln
	50					55				60					
Ala	Ser	Leu	Glu	Ala	Leu	Asp	Asn	Pro	Ala	Arg	Gly	Glu	Gln	Ala	Gln
65					70					75					80
Asp	His	Phe	Gln	Ser	Val	Ala	Ser	Gln	Ser	Tyr	Arg	Pro	Leu	Glu	Val
				85					90					95	
Pro	Asp	Gly	Lys	His	Pro	Leu	Pro	Trp	Ser	Met	Arg	Gln	Thr	Ser	Ser
			100					105					110		
Gly	Tyr	Gly	Arg	Glu	Lys	Pro	Ser	Ala	Gly	Pro	Pro	Thr	Lys	Glu	Val
		115					120					125			
Arg															

```
<210> 1943
<211> 386
<212> DNA
<213> Homo sapiens
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<400> 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga
60
gtcttttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc
120
acacagatgt acatggcata gcaactgcca aaagtatcag cccaaggaac cctactttcc
180
ccagcaacat ctaactcaga aatgctgac tttggcctca atctgggtccc aaaatacctc
240
caggggtat tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact
300
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
360
ctctgcaatc tcacctgcta gagacg
386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5				10					15		
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20				25						30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
		35				40					45				
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
	50				55					60					
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65				70					75					80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
			85				90						95		
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100				105						110		

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

nacgcgtcac gaagcgcgct cggcccacgt ggctccaagg gcgtccacgc gcccctcctc
60
gaccgattgg tgtcgaacat ggcacgggtg catgcgacgc gcaccaagat ccagctcaag
120
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
180
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtcaaaacc
240
gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggctcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1946
 Xaa Ala Ser Arg Ser Ala Leu Gly Pro Arg Gly Ser Lys Gly Val His
 1 5 10 15
 Ala Pro Leu Leu Asp Arg Leu Val Ser Asn Met Ala Arg Trp His Ala
 20 25 30
 Thr Arg Thr Lys Ile Gln Leu Lys Leu Ala Ile Gln Arg Xaa Gly Met
 35 40 45
 Leu Gln Glu Lys Lys Ala Ala Leu His Lys Lys Val Arg Leu Glu Ile
 50 55 60
 Ala Asp Xaa Arg Arg Arg Gln Lys Leu Glu Ser Ala Arg Val Lys Thr
 65 70 75 80
 Glu Ser Leu Ile Met Asp Asp Ile His Leu Glu Leu Leu Glu Leu Leu
 85 90 95
 Glu Leu Tyr Cys Glu Thr Leu Tyr Ala Arg Phe Gly Leu Leu Glu Gly
 100 105 110
 Arg Asp Asn Glu Pro Asp Asp Ala Ile Arg Glu Pro Met Ile Ala Ile
 115 120 125
 Ile His Ala Ala His Arg Thr Glu Val Lys Glu Leu His Val Leu Gln
 130 135 140
 Asn Met Leu
 145

<210> 1947
 <211> 472
 <212> DNA
 <213> Homo sapiens

<400> 1947
 cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgtg taggcgggag
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 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa
 120
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctggggc atgaggctct
 180
 gcagcaggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctcttcgagg gacacgggtg ggttggccga ggccccgtcc aagggtgaccc
 360
 cgtgcgccag gaagagcagg aagagcaggg tgagcagcag gtcaggccca aagtccccag
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccg ag
472

<210> 1948

<211> 150

<212> PRT

<213> Homo sapiens

<400> 1948

Met	Arg	Thr	Leu	Phe	Glu	Leu	Gly	Pro	Trp	Ala	Gly	Asp	Phe	Gly	Pro
1				5				10						15	
Asp	Leu	Leu	Leu	Thr	Leu	Leu	Phe	Leu	Leu	Phe	Leu	Ala	His	Gly	Val
			20					25					30		
Thr	Leu	Asp	Gly	Ala	Ser	Ala	Asn	Pro	Thr	Val	Ser	Leu	Gln	Glu	Phe
		35					40					45			
Leu	Met	Ala	Glu	Glu	Ser	Leu	Pro	Gly	Thr	Leu	Leu	Lys	Leu	Ala	Ala
	50					55					60				
Gln	Gly	Leu	Gly	Met	Gln	Ala	Ala	Cys	Thr	Leu	Thr	Arg	Leu	Cys	Trp
65					70					75				80	
Ala	Trp	Glu	Leu	Ser	Asp	Leu	His	Leu	Leu	Gln	Ser	Leu	Met	Ala	Gln
				85					90				95		
Ser	Cys	Ser	Ser	Ala	Leu	Arg	Thr	Ser	Val	Pro	His	Gly	Ala	Leu	Val
			100					105					110		
Glu	Ala	Ala	Cys	Ala	Phe	Cys	Phe	His	Leu	Thr	Leu	Leu	His	Leu	Arg
		115					120					125			
His	Ser	Pro	Pro	Ala	Tyr	Ser	Gly	Pro	Ala	Val	Ala	Leu	Leu	Val	Thr
	130					135						140			
Val	Thr	Ala	Tyr	Thr	Ala										
145					150										

<210> 1949

<211> 395

<212> DNA

<213> Homo sapiens

<400> 1949

acgcgttgag ggaggcgaca tgcttcatga gcgcttggcg ccactgctca agcgacatct
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gccccttgct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
cgggatgcct cgacgggacg ctcacaagct tccattggcc attcgcgggg cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgccca ccgatcgggc aatggcattc
240
cacagtacgc gcagcggccg tcgtatttgc gccggagccg atcgcgctgt gctttcgtca
300
gccggtcac gctttatgct ccacggcagg tgtggcagca tcttggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc gggtt
395

<210> 1950

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
          20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
          35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
          50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
          85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
          100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
          115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

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cgggccgccc ctctccgctc ccggggccccc gccgccaccg cgccccccgc gggagatgga
60
acagcggaac cggtctcggtg ccctcggata cctgccgcct ctgctgctgc atgccctgct
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttcgc ggccagcgga gccacctcgt attcgctgga
240
gattcagtgg tggtaacctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

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Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
          20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
          35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953
 <211> 329
 <212> DNA
 <213> Homo sapiens

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<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgctcggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcatacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954
 <211> 109
 <212> PRT
 <213> Homo sapiens

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<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1      5      10      15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20      25      30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35      40      45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50      55      60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65      70      75      80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85      90      95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100      105

```

<210> 1955
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgccga caaggtacta tcacacatgg
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tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt
120
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
180
ccgccaaaaca agccatgaac gcagcaaaac aattccactg gaacacccgg ctacaacaac
240
aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcacccaac
300
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
360
acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
			20					25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65				70					75						80
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85					90						95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105					110		
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120						125		

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cggtgaccac
60
caggagctcc tccctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg
120
gggaggaggc ccgcccgggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc
180
agacctggca cagtgtggcg aaggtttcca gtgcgatacc gagtcgaggg cgcatttcgc
240
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt
300

ggggaccctg ggggaaggcgc caacttctct cctctgccc cctcactccc cgcgggcgtc
 360
 cctggggcgc ctgcccgggc cgcactgggc ggcctccatc gtcccttccc tctacctgca
 420
 ctgccccagg cgggagagag gccttggccc nncgaggac cagctgcagc gggcagcggg
 480
 gtctgtctcc cccaaccccc gcccatggc acggggctga accggt
 526

<210> 1958
 <211> 175
 <212> PRT
 <213> Homo sapiens

<400> 1958
 Thr Arg Ser Gly Glu Ile Phe Leu Thr Ser Leu Arg Ala Ala Glu Pro
 1 5 10 15
 Ile Gly Asp His Gln Glu Leu Leu Pro Val Arg Thr Lys Phe Gln Ser
 20 25 30
 Arg Gly His Gly Pro Tyr Leu Leu Gly Arg Arg Pro Ala Gly Ala Ala
 35 40 45
 Val Gly Glu Gly Pro Leu Ala Arg Ser Trp Glu Val Arg Pro Gly Thr
 50 55 60
 Val Trp Arg Arg Phe Pro Val Arg Ser Arg Val Glu Gly Ala Phe Arg
 65 70 75 80
 Gly Asp Cys Gln His Glu Pro Gln Pro Thr Glu Phe Cys Asp Arg Ala
 85 90 95
 Ser Pro Gln Ser Gly Asp Pro Gly Glu Gly Ala Asn Phe Ser Pro Leu
 100 105 110
 Pro Thr Ser Leu Pro Ala Gly Val Pro Gly Pro Pro Ala Arg Ala Ala
 115 120 125
 Leu Gly Gly Leu His Arg Pro Phe Pro Leu Pro Ala Leu Pro Gln Ala
 130 135 140
 Gly Glu Arg Pro Trp Pro Xaa Glu Gly Pro Ala Ala Ala Gly Ser Gly
 145 150 155 160
 Val Leu Leu Pro Gln Pro Pro Pro His Gly Thr Gly Leu Asn Arg
 165 170 175

<210> 1959
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 1959
 gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcggaaggc tcacccgagt
 60
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatcccac gacatggtga
 120
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagt
 240
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct
 300

cgtctgcctc ggggtgaattg ccgaggaggt acatcttgcc tggaccgta atcgcggtga
 360
 agtcgacgcg caacgcgt
 378

<210> 1960
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
 1 5 10 15
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
 20 25 30
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
 35 40 45
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly
 50 55 60
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
 65 70 75 80
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro
 85 90 95
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala
 100 105 110

<210> 1961
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1961
 ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg
 60
 tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag
 120
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcacc aggaccacgg
 180
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggaggtac
 240
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
 300
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag
 360
 acagagcagg cctatgtggc gcgc
 384

<210> 1962
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

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      1           5           10           15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20           25           30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35           40           45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50           55           60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
      65           70           75           80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85           90           95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100          105          110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115          120          125

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<210> 1963
 <211> 323
 <212> DNA
 <213> Homo sapiens

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<400> 1963
nnncccttcc taccctccca tactccccac ccctcttctc cccctgtgc tgagcttgca
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ggcatgaaac acccacctgg cctctctccc tctgttttgc cccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcaccctgg
180
cgaccactca ggcatgcac tcgcggggccc ccttcagacc tctcggggtc atcttccct
240
tccctggcca ttatttttct tcatctgggc tggggccgga ggggcgttcc ccccttctc
300
cttctttctt tttttttctc ttt
323

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<210> 1964
 <211> 107
 <212> PRT
 <213> Homo sapiens

```

<400> 1964
Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
1           5           10           15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20           25           30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35           40           45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50           55           60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
      65           70           75           80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85           90           95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

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100

105

<210> 1965
 <211> 1416
 <212> DNA
 <213> Homo sapiens

<400> 1965
 cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttggtg
 60
 agcaccctgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct
 120
 gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
 180
 cgggccctgt cactgacacg ggcactggag gaggagcagg aggcacgtga ggagctggag
 240
 cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc
 300
 ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat
 360
 ctgctgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
 420
 cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt
 480
 gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagagggtg
 540
 gagcgggatg aggagcggaa gcagcgcaact ctggccgtgg ctgcccgcaa gaagctggag
 600
 ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
 660
 gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag
 720
 acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaaaa gcgcctcaag
 780
 ggcctggagg ctgaggtgct gcggtctgag gaggaactgg ccgcctcgga ccgtgctcgg
 840
 cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc
 900
 aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa
 960
 gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc
 1020
 ctgcaggtag agtcaactgac cacagagctg tcagctgagc gcagtttctc agccaaggca
 1080
 gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag
 1140
 gaggatgctg gggcccgtgc ccgccacaag atgaccattg ctgcccttga gtctaagttg
 1200
 gccaggtctg aggagcagct agagcaagag accagagagc gcattcctctc tggaaagctg
 1260
 gtgccccaaa gtaagaagcg gtttaagag gtggtgctcc aggtggagga ggagcggagg
 1320
 gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag
 1380

cggcagctgg aggaggccga ggaggaggca tccccg
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
1				5					10					15	
Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
			20					25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu
65					70				75					80	
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
			85					90						95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
			100					105					110		
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
		115					120					125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130					135					140				
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155					160
Asp	Glu	Ala	Gly	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg	
			165					170					175		
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
			180					185					190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
		195					200					205			
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210					215					220				
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225					230					235				240	
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245						250					255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260						265					270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
		275					280					285			
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290					295						300			
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310					315				320	
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
			325						330					335	
Arg	Lys	Leu	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala
		340						345					350		
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

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      355              360              365
Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
      370              375              380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385              390              395              400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
      405              410              415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
      420              425              430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
      435              440              445
Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
      450              455              460
Glu Ala Glu Glu Glu Ala Ser Arg
465              470

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<210> 1967
 <211> 401
 <212> DNA
 <213> Homo sapiens

```

<400> 1967
aaatttgaat cctggaaagc tgatctcgat aagtcgtttg tcgagctggt tgcggcggtg
60
ccgacgcgcc taatttggat cgtgcagtaa gagcttctcc attcctcggc gccaaagggg
120
tgcacacat ctgcggcca gtcagctccc ctgggcttgc actcgtcgga gatgctggcc
180
ttgcaccaga tcctctgtgg ggcgtcgggt gtggctgggc attccagtcg gcagcttggt
240
tagtggactg taccggatct catttggtg accggaccgc cttagatagg gcgcttcgca
300
gttatcatcg ataccaccgg cattctcttg ggtggcatga acgcctcatc tctagatatg
360
caaacggccg ggggttttcat gcgctcgaga agctgatgct g
401

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<210> 1968
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 1968
Met His His Ile Ser Arg Pro Val Ser Ser Pro Gly Leu Ala Leu Val
1              5              10              15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
      20              25              30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
      35              40              45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
      50              55              60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
65              70              75              80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969
 <211> 464
 <212> DNA
 <213> Homo sapiens

<400> 1969
 nncatcgacg cgcactggac tcatctgggt gacggccac agatggacac tctgcgcgag
 60
 gaggtcgccg ttcaccgcgt cacggatgct gtcaccctgc tcggtcacgt cgccaacacc
 120
 caggtcatgg cgaccagcg tgatctcaaa ccgtcagtat tcgtcaacct ctctctctcg
 180
 gaaggacttc ctgtatcaat gatggaggtt gcttccctcg gtatcccat tctgcgcgact
 240
 ggcgtcgccg gagtaggaga aatcgtctcg tctgacaacg ggcattctatt gcctgccgag
 300
 ttcaccgaca ccagggcatt tgacgcgtta gtgcagctgg cacgtctgtc tgaggacgag
 360
 taccagcagg tgtgtcaggc ctcccgccag gtgtgggaag aaaagttccg cgctctgtc
 420
 gtctaccccg aattctgtcg cgagtgtctg ggcgacgctg atca
 464

<210> 1970
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1970
 Xaa Ile Asp Ala His Trp Thr His Leu Gly Asp Gly Pro Gln Met Asp
 1 5 10 15
 Thr Leu Arg Glu Glu Val Ala Val His Arg Val Thr Asp Ala Val Thr
 20 25 30
 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp
 35 40 45
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro
 50 55 60
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr
 65 70 75 80
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu
 85 90 95
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln
 100 105 110
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser
 115 120 125
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu
 130 135 140
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp
 145 150

<210> 1971
 <211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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accggttgta ggtgtacaaa cactgctgac atcagccagc tcctgagtgt caggagagac
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acagaagtac tcagggttgtt tgtgtgttga ccgagagAAC agctcagatt gaggaacgag
120
acagacgacg acaaaaacaa ttagagcatc agttgatata atacaaatgg aatataatgc
180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
480
gtgtaatcag ttcacaagaa ttgagaaaca aacaaaacag
520

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<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

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Met Glu Tyr Asn Ala Ser Asn Ile Ser Asn Ser Arg His Asp Ser Asp
1      5      10      15
Glu Ile Ser Gly Lys Met Asn Thr Tyr Met Asn Ser Thr Thr Ser Lys
20     25     30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
35     40     45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
50     55     60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
65     70     75     80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
85     90     95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
100    105    110
Glu Lys Gln Thr Lys Gln
115

```

<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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acgcgtacct atgccacgcg catggcggat cagttgacgc cggcactagg cagctactta
60

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tccgcaggtc aaaagaaatc ggacggcctc ggatccttct tcgtggccac tacccttgaa
120
gagctacaag cgatgaacag cgatactcgc ttcaccacga gcgtgggaat cgacctatcc
180
cccgtcgcgat ctttctccgc ttggggcgctg cgcggaacga ctttttctgc gccgtcgatg
240
acaaaggctt cccgtcgcgag ctcgggccgca ccaagcgcac cgcgtcgctg tggcaaaagc
300
tggcgctcgc cgccagtga atcgtgtgca c
331

<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

Met	Ala	Asp	Gln	Leu	Thr	Ala	Ala	Leu	Gly	Ser	Tyr	Leu	Ser	Ala	Gly
1			5						10					15	
Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
			20					25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35					40					45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55				60					
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65				70						75				80	
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
			85						90					95	
Pro	Pro	Val	Lys	Ser	Cys	Ala									
			100												

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

acgcgtcggg ccaatcgctc gtggagctgc aaaccgcgct gcaagcccg c gacgagcaac
60
gtctgacggc ttggaccgat gcgctgggtg caatgggcgc caagctgagc caggcgtggg
120
agaaggcggg tgccgacacg gcgagccgctc agcaggagat ttgcgatgcg ctggcgcgaga
180
ctgcgcgcga catctcttcg caaacacagg cccacgcca caacacgatc gccgagattt
240
ctcgactggg gcaggccgcc tcggaggcgc caaaggctgc tgccgaagtg gttgccgagc
300
tgcgccagaa gctgtccgac agcatgggtc gcgacacggg cgatgctgga agaacgcacg
360
cgcatgctgg
370

<210> 1976

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1976
 Met Arg Val Arg Ser Ser Ser Ile Ala Arg Val Ala Asp His Ala Val
 1 5 10 15
 Gly Gln Leu Leu Ala Gln Leu Gly Asn His Phe Gly Ser Ser Leu Trp
 20 25 30
 Arg Leu Arg Gly Gly Leu His Gln Ser Arg Asn Leu Gly Asp Arg Val
 35 40 45
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg
 50 55 60
 Gln Arg Ile Ala Asn Leu Leu Leu Thr Ala Arg Arg Val Gly Thr Arg
 65 70 75 80
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile
 85 90 95
 Gly Pro Ser Arg Gln Thr Leu Leu Val Ala Gly Leu Gln Arg Gly Leu
 100 105 110
 Gln Leu His Glu Arg Leu Ala Arg Arg
 115 120

<210> 1977
 <211> 551
 <212> DNA
 <213> Homo sapiens

<400> 1977
 ccgcgggcag gtggcatgtg ggctgagccc cgaagaaagt caaaagataa ggaagaggac
 60
 aggtttctag gaagaagttg gctgagcagg agttgggcag gttaagagct gggtaggggg
 120
 agagaggaga caggcagcca ggctgttaca cagggaggag cacaggaggt gcacgggagg
 180
 agccaagcgg gagggcaggc aatggccagg ttggaagatc tgcacctccc tggttactgg
 240
 aggaatgaaa ctggttggac tgactgcagg gagaggctcc agttgaaaca tgagagaagt
 300
 actggatgaa aaaggtgcca caactgagac cagaaggcag attcctgaac tggtaggggtg
 360
 ccaaggatgc atatcaaaga ctgctggaac atgtgggtat caagattgaa gacagtgaag
 420
 gttaaaatgg cctgatccaa agctggaggg ggggtggagt gactgggtgac tgctcttccc
 480
 acggacaggc attcaggcaa gctttcaaac tgagctctaa attctgctct gggttctaag
 540
 cagactcatg a
 551

<210> 1978
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1978

Met His Pro Trp His Pro Thr Ser Ser Gly Ile Cys Leu Leu Val Ser
 1 5 10 15
 Val Val Ala Pro Phe Ser Ser Ser Thr Ser Leu Met Phe Gln Leu Glu
 20 25 30
 Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
 35 40 45
 Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50 55 60
 Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
 65 70 75 80
 Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
 85 90 95
 Gln Pro Thr Ser Ser
 100

<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

ncttgactca atcctgcaag caagtgtgtg tgtgtcccca tcccccgccc cgtaaacttc
 60
 atagcaaata acaaataccc ataaagtccc agtcgcgcag cccctccccc cgggcagcgc
 120
 actatgctgc tcgggtgggc gtccctgctg ctgtgcgcgt tccgcctgcc cctggccgcg
 180
 gtcggccccg ccgcgacacc tgcccaggat aaagccgggc agcctccgac tgctgcagca
 240
 gccgcccagc cccgcccggc gcagggggag gaggtgcagg agcgagccga gcctcccggc
 300
 cccccgcacc ccctggcgca gcggcgagg agcaaggggc tggcgcagaa catcgaccaa
 360
 ctctactccg gcggcgggcaa ggtgggctac ctctgtctac cgggcggccg gaggttcctc
 420
 ttggacctgg agcgagatgg ttcgggtgggc attgctggct tcgtgcccgc aggaggcggg
 480
 acgagtgcgc cctggcgcca ccggagccac tgcttctatc ggggcacagt ggacgctagt
 540
 ccccgtcttc tggtgtgttt tgacctctgt ggggggtctc acggcttctt cgcggtcaag
 600
 cacgcgcgct acaccctaaa gccactgctg cgcggaccct gggcggagga agaaaagggg
 660
 cgcgtgtacg gggatgggtc cgcacggatc ctgcacgtct acaccgcag ggcttcagct
 720
 tcgaggccct gccgcgcgc gccagctgcg aaacccccgc gtccacaccg gaggcccacg
 780
 agcatgctcc ggcgcacagc aaccgcagcg gacgcgcagc acgcctcgca gctcttgagc
 840
 cagtccgctc tctcgcgcgc tgggggctca ggaccgcaga cgtgggtggc gcggcggcgc
 900
 cgctccatct cccgggcccc ccagggtggag ctgcttctgg tggctgacgc gtccatggcg
 960

cggttgatg gccggggcct gcagcattac ctgctgaccc tggcctccat cgccaatagg
1020
ctgtacagcc atgctagcat cgagaaccac atccgcctgg ccgtggtgaa ggtgggtggtg
1080
ctaggcgaca aggacaagag cctggaagtg agcaagaacg ctgccaccac actcaagaac
1140
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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly
35           40           45
Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu
50           55           60
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu
65           70           75           80
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg
85           90           95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly
100          105          110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser
115          120          125
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala
130          135          140
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His
145          150          155          160
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu
165          170          175
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val
180          185          190
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala
195          200          205
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg
210          215          220
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln
225          230          235          240
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg
245          250          255
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu
260          265          270
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His
275          280          285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala
290          295          300
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Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr
325          330          335
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp
340          345          350
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp
355          360          365
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly
370          375          380
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly
385          390          395          400
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly
405          410          415
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420          425          430
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser

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		595					600					605						
Arg	Ala	Ile	Tyr	His	Ser	Cys	Ser	Leu	Met	Pro	Cys	Pro	Pro	Asn	Gly			
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Thr	Gly	Tyr	Tyr	Val	Val	Phe	Ser	Pro	Lys	Val	Thr	Asp	Gly	Thr	Glu			
	675						680					685						
Cys	Arg	Pro	Tyr	Ser	Asn	Ser	Val	Cys	Val	Arg	Gly	Lys	Cys	Val	Arg			
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Phe	Asn	Lys	Lys	Ser	Lys	Gly	Tyr	Thr	Asp	Val	Val	Arg	Ile	Pro	Glu			
			740					745					750					
Gly	Ala	Thr	His	Ile	Lys	Val	Arg	Gln	Phe	Lys	Ala	Lys	Asp	Gln	Thr			
		755					760					765						
Arg	Phe	Thr	Ala	Tyr	Leu	Ala	Leu	Lys	Lys	Lys	Asn	Gly	Glu	Tyr	Leu			
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Ile	Asn	Gly	Lys	Tyr	Met	Ile	Ser	Thr	Ser	Glu	Thr	Ile	Ile	Asp	Ile			
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Gly Pro Trp Leu Ala Cys Ser Arg Thr Cys Asp Thr Gly Trp His Thr
              885              890              895
Arg Thr Val Gln Cys Gln Asp Gly Asn Arg Lys Leu Ala Lys Gly Cys
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<210> 1981
<211> 327
<212> DNA
<213> Homo sapiens

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<400> 1981
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<210> 1982
<211> 107
<212> PRT
<213> Homo sapiens

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<400> 1982
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20     25     30
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35     40     45
Ser Pro Pro Lys Ala Ala Gly Gly Arg Cys Pro Gly Pro Cys Arg
50     55     60
Ile Met Ala Trp Pro Gly Gln Arg Ala Ser Ser Ser Gly Arg Gly Arg
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<210> 1983
<211> 383
<212> DNA
<213> Homo sapiens

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<400> 1983

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<210> 1984

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1984

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			20					25					30		
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35					40					45			
Phe	Ile	Asp	Ile	Ile	Gly	Ser	Thr	Lys	Leu	Ser	Leu	Glu	Tyr	Asp	Ser
50						55					60				
Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
65					70				75					80	
Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
				85					90					95	
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
			100					105				110			
Ala	Ser	Leu	Tyr	Cys	Ala	Arg	Val	Val	Met	Asn	Arg	Phe	Asp	His	
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<210> 1985

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1985

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 180
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 240

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<210> 1986

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1986

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		20						25					30		
Ile	Glu	Phe	Arg	Met	Gln	Asn	Ile	Ser	Ser	Val	Leu	Val	Gln	Met	Gly
		35					40					45			
Leu	Asp	Arg	Ile	Lys	Gly	Tyr	Lys	Ala	Cys	Glu	Pro	Met	Trp	Gly	Pro
	50					55				60					
Gly	Gly	Arg	Pro	Thr	Thr	Phe	Ala	Arg	Pro	Phe	Ala	Asp	Thr	Arg	Val
65					70					75					80
Phe	Glu	Ser	Asp	Glu	Thr	Ala	Gln	Thr	Ala	Asp	Glu	Gln	Thr	Leu	Ile
				85					90					95	
Arg	Arg	Ala	Asn	Lys	Leu	Gln	Leu	Lys	Arg	Phe	Asp	Gln	Val	Pro	Asp
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<210> 1987

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1987

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<210> 1988

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1988

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          20           25           30
Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg
          35           40           45
Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg
          50           55           60
Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala
65           70           75           80
Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly
          85           90           95
Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys
          100          105          110
Phe Val Met Arg Thr Glu Asp Asn Leu Glu His Ile Ala Gln Thr Ile
          115          120          125
Arg Asp Val Met Trp Ile Thr Lys Gly Thr Val
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<210> 1989

<211> 10795

<212> DNA

<213> Homo sapiens

<400> 1989

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<211> 3102

<212> DNA

<213> Homo sapiens

<400> 1991

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<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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1518

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Glu Ala Ala Arg Ile	Ile Ala Glu Ala Phe Lys Thr Lys Asp Arg Asp			
705	710	715		720
Tyr Ile Asp Phe Leu Val Thr Glu Phe Asn Val Met Leu				
	725	730		

<210> 1993
 <211> 957
 <212> DNA
 <213> Homo sapiens

<400> 1993
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 120
 tcggggatcc tctcgctga ctccggcagt atcgaactgg ctctgccgga ccgcaccgtc
 180
 aacgtcgaaa acctctctaa cgaaggccga gcaaagctac gccgtcaatc ccttggtttc
 240
 gtcttccaac aaggaatgct cgtacccgag ctactgctg tcgagaacac cgccctaccc
 300
 ctcatgctta acggcgtatc ccaaaccgat gcggtcaggt atgccacca atggcttgaa
 360
 tcgatggggg taggcggcat ggaggatcgt cggattgggt agctctccgg gggccaagct
 420
 caacgcgtca ctattgcccgtgtccaggta atcgatccgt cgattgtctt cgtgacgaa
 480
 cccaccggag ccctcgactc agccaccgcc gtcgaagtca tggccattct gctttcggcg
 540
 acgaccgggc ggggacgcac cctcgtcgtc gtcacccatg acgaggacgt tgcccgcgc
 600
 tgccagcgca tccttcattc gcacgacggg cggatcgtct ctgaccacgt acgtcattcc
 660
 gatgggaggt ggtgatcatg actataacgc cccctatcga accgggaacc gccgatcaaa
 720
 ggatcccgtc cctccccgtc cccgagcccc tgggagctac gcccgacgt cttaccactg
 780
 ctgcgacatc cagcatgacc ctccgtgcct cagccgctga ccactccacc tggcggttgc
 840
 cggtagtgtc tttcgtgtc attgcaacca tcactctcga cgtcactggc ggtgccgtca
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 957

<210> 1994
 <211> 224
 <212> PRT
 <213> Homo sapiens

<400> 1994
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 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

			20					25					30				
Lys	Thr	Thr	Leu	Leu	His	Cys	Leu	Ser	Gly	Ile	Leu	Ser	Pro	Asp	Ser		
		35					40					45					
Gly	Ser	Ile	Glu	Leu	Ala	Leu	Pro	Asp	Arg	Thr	Val	Asn	Val	Glu	Asn		
	50					55					60						
Leu	Ser	Asn	Glu	Gly	Arg	Ala	Lys	Leu	Arg	Arg	Gln	Ser	Leu	Gly	Phe		
65					70				75					80			
Val	Phe	Gln	Gln	Gly	Met	Leu	Val	Pro	Glu	Leu	Thr	Ala	Val	Glu	Asn		
			85					90					95				
Thr	Ala	Leu	Pro	Leu	Met	Leu	Asn	Gly	Val	Ser	Gln	Thr	Asp	Ala	Val		
		100					105					110					
Arg	Tyr	Ala	Thr	Gln	Trp	Leu	Glu	Ser	Met	Gly	Leu	Gly	Gly	Met	Glu		
	115					120					125						
Asp	Arg	Arg	Ile	Gly	Gln	Leu	Ser	Gly	Gly	Gln	Ala	Gln	Arg	Val	Thr		
	130				135					140							
Ile	Ala	Arg	Ser	Gln	Val	Ile	Asp	Pro	Ser	Ile	Val	Phe	Ala	Asp	Glu		
145				150				155						160			
Pro	Thr	Gly	Ala	Leu	Asp	Ser	Ala	Thr	Ala	Val	Glu	Val	Met	Ala	Ile		
		165					170						175				
Leu	Leu	Ser	Ala	Thr	Thr	Gly	Arg	Gly	Arg	Thr	Leu	Val	Val	Val	Thr		
	180					185				190							
His	Asp	Glu	Asp	Val	Ala	Arg	Arg	Cys	Gln	Arg	Ile	Leu	His	Leu	His		
	195				200					205							
Asp	Gly	Arg	Ile	Val	Ser	Asp	His	Val	Arg	His	Ser	Asp	Gly	Arg	Trp		
	210				215					220							

<210> 1995

<211> 285

<212> DNA

<213> Homo sapiens

<400> 1995

catcaccacc attatcaaca ccatcatcac caccattatc acctttatca ccaccatcat
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120actgtcctca tcatgtgtga cttggactgt ggaccagccc ctcggtctct gctctgctga
180cctatattct ttgtctcttg ttcttgagaa gctgggagtt gagaccaggt aaggtgttgt
240acagacactt gtgaccccaa attccatgag acagaggacc tcccn
285

<210> 1996

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1996

His His His His Tyr Gln His His His His His Tyr His Leu Tyr
1 5 10 15His His His His His His His His His His Tyr His His His Ala
20 25 30

His His His Val Met Thr Leu Asn Thr Val Leu Ile Met Cys Asp Leu

35 40 45
 Asp Cys Gly Pro Ala Pro Arg Ala Leu Leu Cys
 50 55

<210> 1997
 <211> 313
 <212> DNA
 <213> Homo sapiens

<400> 1997
 ccgctggtgg tgggtgctgct gattggcatg gccatctata ccttccgcaa gaaagacctg
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 120
 ggtggcggca tcggttttta cgacggcctg ttcgggccgg gtaccggcag tttcctgatg
 180
 ttctgttcg tcggtttttt gcgttttgat ttcttgcag cttctgccgc ggccaagggt
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 300
 tatggctacg cgt
 313

<210> 1998
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1998
 Pro Leu Val Val Leu Leu Ile Gly Met Ala Ile Tyr Thr Phe Arg
 1 5 10 15
 Lys Lys Asp Leu Gly Lys Leu His Lys Pro Val Ser Ile Gly Arg Arg
 20 25 30
 Glu Met Leu Val Gly Leu Ala Ile Gly Gly Gly Ile Gly Phe Tyr Asp
 35 40 45
 Gly Leu Phe Gly Pro Gly Thr Gly Ser Phe Leu Met Phe Leu Phe Val
 50 55 60
 Arg Phe Leu Arg Phe Asp Phe Leu His Ala Ser Ala Ala Ala Lys Val
 65 70 75 80
 Val Asn Leu Ala Thr Asn Val Ala Ala Leu Cys Phe Phe Ile Pro Ser
 85 90 95
 Gly Asn Val Leu Tyr Gly Tyr Ala
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<210> 1999
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 1999
 ccgcggcgca agttggaatg gcaaaacatt ttcattcccc gcgagcaagg tagcttgagt
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 120

ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat
 180
 gtgattatgt ctgtgaagtc caagactatg gtcgggcagt tgggtgacta tggccgtata
 240
 actttcgttg atatgaccgg ctctattacg caggggtcaaa acgatgcagc tcagggttg
 300
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct
 360
 ggaaagccca tggatgacat cgattcgtcc ttaaagctt
 399

<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
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Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20						25					30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50					55					60				
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65					70				75					80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
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<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

nnngaataag gacgtcataa tttgctgac agcagtgcag ctgactggag gagggacaaa
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 120
 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac
 180
 tacgctgccg cttctgacac ttacaggtag agcggaaccc catacacctt ccagccatga
 240
 tgccgaagag ganncgagcc actgaaggag tcccgcagga aggaggcctt cttctgtctg
 300
 gagttcttac tggataacgg tgcagacccc tccctgcggg acaggcaggg ctacacagct
 360
 gtgcactatg cagccgccta tggcaacaga cagaacctcg aactgctctt agaaatgtcc
 420
 tttaactgcc tggaggatgt ggagagcacc attccagtca gccctttgca cttagctgcc
 480
 tacaacggtc actgtgaagc cttgaagacg ctggcggaga cgctgggtgaa tctggacgta
 540

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggttc tactgagtgt
 600
 gtggagggtgc ttacagccca cggcgctctt gccctcatca aggagcgcaa gcgcaagtgg
 660
 acacccctgc acgccgtgc tgcctctggc cacactgact ccctgcactt gctgatcgac
 720
 agtggggaac gagctgacat cacagatgtc atggatgcct atggacagac cccactgatg
 780
 ctggccatca tgaatggcca tgtggactgt gtacatctgc tgctagagaa aggatccaca
 840
 gctgatgctg ctgacctccg gggccgcact gccctccacc gcggggcagt gactggctgt
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 960
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 1020
 ctgcaggctg ccctttccac agatccctg gatgccgggg tggattacag cggatactcg
 1080
 cccatgcact gggcctccta cactggacat gaagattgtc tggagttgtt acttgaacac
 1140
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 1200
 aaccaagaca gcaccacaga gatgctactg ggagctctgg gtgccaagat tgtgaacagc
 1260
 cgagatgcca aaggacggac ccccttcac gccgctgcct tcgcggacaa tgtctctggg
 1320
 ctccggatgc tgctgcagca tcaagctgag gtgaacgcca ctgaccacac tggccgcact
 1380
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 1434

<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

Xaa	Asn	Glu	Gly	Arg	His	Asn	Leu	Leu	Ile	Ser	Ser	Ala	Ala	Asp	Trp
1				5					10					15	
Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
		35					40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
	50					55					60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

ntcattgacta cggagacact gaagaaaatt cagattgata ggcagttttt cagcgaatgtg
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 attgcagata ccattaagga gttgcaagat teggccactt acaacagtct cctgcaagct
 120
 ttgagcaaaag agaggggaaaa caaaatgcat ttctatgaca tcattttccag ggaggaaaaa
 180
 ggaagaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa
 240
 tttgaagtcc agagtcagaa tgagtatatt gctaacctca aggaccaact gcaagagatg
 300
 aaggcaaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc
 360
 cagacccaga aaaagtgtaa cagaacagag gaactcttgg tggaagagat tgagaaactc
 420
 aggatgaaaa ccgaagaaga ggcccggact catacagaga ttgaaatgtt ccttagaaaag
 480
 gagcagcagg tgggtcccca cagcttttct atgctttgac ttttttttg tactctgctt
 540
 atactgagga aacaaaaaga atattttgaa ggaaaaccaa ccatcattct ttcagcctaa
 600
 tgaactttag ctcatgtttt ctttcagggt tatgcatctg aatagatatc ttatatagct
 660
 gtaatttgag agagtgcagg taaaattg
 688

<210> 2004

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2004

Xaa	Met	Thr	Thr	Glu	Thr	Leu	Lys	Lys	Ile	Gln	Ile	Asp	Arg	Gln	Phe
1				5					10					15	
Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35				40						45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50				55					60					
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65				70					75					80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85					90						95	
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
			100					105					110		
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
		115				120						125			
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130				135						140				
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145				150					155					160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2005
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 120
 tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga
 180
 agcccgccgt gtcacagggt ctctgaccg gctgggtagg gtttggcctt atcttacagc
 240
 cagtgcctgtg tttgctcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat
 300
 gtctactccc tgctttgggc tgtcctgaaa acaattgcaa agacattgtg gctg
 354

<210> 2006
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2006
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu
 1 5 10 15
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu
 20 25 30
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe
 35 40 45
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly
 50 55 60
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg
 65 70 75 80
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu
 85 90 95
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala
 100 105 110

<210> 2007
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2007
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg
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 tgtatatgca tgtgtgtatg tgcatgtacg tgtnnngtgca tatgcgtgtg catgcatgcg
 120
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcatgcatg
 180
 tgcacgtgca tatgtgtaca cgtgtatgcg tgtacatgta tgagcatatg tacacgtgtg
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggt
 300
 ttgagtattg ctggtaggca gggacaactt tccgt
 335

<210> 2008
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2008
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val
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 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa
 20 25 30
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met
 35 40 45
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile
 50 55 60
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val
 65 70 75 80
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe
 85 90 95
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser
 100 105 110

<210> 2009
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 2009
 gacatcaccc cgctgctggc caaccccaac ggtttctccg cagcgatcga ggaactggtg
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 ctgcgttccc cagcgacat cgacgtggtc gtcggcatgg aggctcgagg ctctctcttc
 120
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cgggtgcgcaa gccggggaag
 180
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gacctcacc
 240
 gtccaccagt acgccatcaa gccgggggtcg cgcgtcatca tcgtcgac
 288

<210> 2010
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2010
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile
 1 5 10 15
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly
 20 25 30
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

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<210> 2011
<211> 384
<212> DNA
<213> Homo sapiens
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<210> 2012
<211> 123
<212> PRT
<213> Homo sapiens
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<210> 2013
<211> 309

<212> DNA

<213> Homo sapiens

<400> 2013

gcgtatcccc acggtacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa
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gccttgctcg ccaggtcca cagcacacaa acccgggtgt acctggccaa tatcaatgcc
120
gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc
180
cgcggaacg gcgtcgccaa acgcttgccc gtcagcgtgc cgtcccattg tgcgctgctg
240
gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccgncn
300
nnnccnncn
309

<210> 2014

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5				10					15		
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
		20					25					30			
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
	35					40					45				
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50				55				60						
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70				75						80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
			85				90						95		
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
			100												

<210> 2015

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2015

acgcgtgccg tgctcgggtat ccgccgccac caccctgtct ttgggaccgg cgagttcacc
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120
gtcctgtgcc tggctaactct ctccgatact gagcggacgg ttgcccttca ccttccacaa
180
ttcgcgggcg tggcgggctc ttctctcctc catggtcagg acgcgcaacc agtaaaagct
240
gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggt
300

gaggagaggt catgaccgct tgggaagac
329

<210> 2016
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2016
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr
1 5 10 15
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe
20 25 30
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser
35 40 45
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
50 55 60
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
65 70 75 80
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu
85 90 95
Gln Met Ser Gly Glu Glu Arg Ser
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<210> 2017
<211> 457
<212> DNA
<213> Homo sapiens

<400> 2017
accaaggtca gattcatggc ctcttttctc ccagcggcca gcaggaaacg cggggagccc
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ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca
120
ggcgacaagc tactggccat tgacaatatc cgcttgaca actgccccat ggaggacgcc
180
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac
240
aactctgatg agctggagac cacaggtgcc gtcagttaca cagtggagct gaagcgctac
300
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc
360
tcaggcctcc ccaaactggg cctggctgag aggactggtg ccatccagtg ggggaaccgc
420
ttcggaccat aacaactgta ttctcaggga cggacca
457

<210> 2018
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2018
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

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Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

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<210> 2019

<211> 483

<212> DNA

<213> Homo sapiens

<400> 2019

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<210> 2020

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2020

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 <213> Homo sapiens

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 Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
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 85 90 95
 Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
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 <213> Homo sapiens

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 <213> Homo sapiens

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His Ile Pro	Val Asp Lys	Ile Gly Glu Val	Ile Gly Pro Lys Gly Lys
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Met Ile Asn	Gln Ile Gln	Asp Asp Thr	Gly Ala Asn Ile Ser Ile Glu
65	70	75	80
Asp Asp Gly	Thr Ile Phe	Ile Gly Ala	Asp Asn Gly Asp Ser Ala Glu
85	90	95	
Ser Ala Arg	Ser Met Ile	Asn Ala Ile	Ala Asn Pro Gln Met Pro Glu
100	105	110	
Val Gly Glu	Arg Tyr Leu	Gly Thr Val	Val Val Lys Thr Thr Ser Phe Gly
115	120	125	
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<210> 2025

<211> 872

<212> DNA

<213> Homo sapiens

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<212> PRT
<213> Homo sapiens

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100 105 110
Leu Gln Glu Ala Val Gln Glu Cys Ala Asp Pro Gly Val Pro Ser Gly
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<212> DNA
<213> Homo sapiens

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 65 70 75 80
 Leu Arg Ser Asn Gln Glu Ser Leu Ile Leu Ser Gln Lys Cys Leu Leu
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 <212> DNA
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<211> 794

<212> PRT

<213> Homo sapiens

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			20					25					30		
Leu	Asp	Ser	Lys	Thr	Thr	Leu	Thr	Ser	Asp	Glu	Ser	Val	Lys	Asp	His
		35					40					45			
Thr	Thr	Ala	Gly	Arg	Val	Val	Ala	Gly	Gln	Ile	Phe	Leu	Asp	Ser	Glu
		50				55					60				
Glu	Ser	Glu	Leu	Glu	Ser	Ser	Ile	Gln	Glu	Glu	Glu	Asp	Ser	Leu	Lys
65					70					75				80	
Ser	Gln	Glu	Gly	Glu	Ser	Val	Thr	Glu	Asp	Ile	Ser	Phe	Leu	Glu	Ser

				85					90					95			
Pro	Asn	Pro	Glu	Asn	Lys	Asp	Tyr	Glu	Glu	Pro	Lys	Lys	Val	Arg	Lys		
			100					105					110				
Pro	Ala	Leu	Thr	Ala	Ile	Glu	Gly	Thr	Ala	His	Gly	Glu	Pro	Cys	His		
		115					120					125					
Phe	Pro	Phe	Leu	Phe	Leu	Asp	Lys	Glu	Tyr	Asp	Glu	Cys	Thr	Ser	Asp		
	130					135					140						
Gly	Arg	Glu	Asp	Gly	Arg	Leu	Trp	Cys	Ala	Thr	Thr	Tyr	Asp	Tyr	Lys		
145					150					155					160		
Ala	Asp	Glu	Lys	Trp	Gly	Phe	Cys	Glu	Thr	Glu	Glu	Glu	Ala	Ala	Lys		
				165					170						175		
Arg	Arg	Gln	Met	Gln	Glu	Ala	Glu	Met	Met	Tyr	Gln	Thr	Gly	Met	Lys		
		180						185					190				
Ile	Leu	Asn	Gly	Ser	Asn	Lys	Lys	Ser	Gln	Lys	Arg	Glu	Ala	Tyr	Arg		
	195					200						205					
Tyr	Leu	Gln	Lys	Ala	Ala	Ser	Met	Asn	His	Thr	Lys	Ala	Leu	Glu	Arg		
	210					215					220						
Val	Ser	Tyr	Ala	Leu	Leu	Phe	Gly	Asp	Tyr	Leu	Pro	Gln	Asn	Ile	Gln		
225					230					235					240		
Ala	Ala	Arg	Glu	Met	Phe	Glu	Lys	Leu	Thr	Glu	Glu	Gly	Ser	Pro	Lys		
				245					250					255			
Gly	Gln	Thr	Ala	Leu	Gly	Phe	Leu	Tyr	Ala	Ser	Gly	Leu	Gly	Val	Asn		
			260					265					270				
Ser	Ser	Gln	Ala	Lys	Ala	Leu	Val	Tyr	Tyr	Thr	Phe	Gly	Ala	Leu	Gly		
	275					280						285					
Gly	Asn	Leu	Ile	Ala	His	Met	Val	Leu	Gly	Tyr	Arg	Tyr	Trp	Ala	Gly		
	290					295					300						
Ile	Gly	Val	Leu	Gln	Ser	Cys	Glu	Ser	Ala	Leu	Thr	His	Tyr	Arg	Leu		
305				310						315					320		
Val	Ala	Asn	His	Val	Ala	Ser	Asp	Ile	Ser	Leu	Thr	Gly	Gly	Ser	Val		
				325					330					335			
Val	Gln	Arg	Ile	Arg	Leu	Pro	Asp	Glu	Val	Glu	Asn	Pro	Gly	Met	Asn		
		340						345					350				
Ser	Gly	Met	Leu	Glu	Glu	Asp	Leu	Ile	Gln	Tyr	Tyr	Gln	Phe	Leu	Ala		
	355						360					365					
Glu	Lys	Gly	Asp	Val	Gln	Ala	Gln	Val	Gly	Leu	Gly	Gln	Leu	His	Leu		
	370					375					380						
His	Gly	Gly	Arg	Gly	Val	Glu	Gln	Asn	His	Gln	Arg	Ala	Phe	Asp	Tyr		
385					390					395					400		
Phe	Asn	Leu	Ala	Ala	Asn	Ala	Gly	Asn	Ser	His	Ala	Met	Ala	Phe	Leu		
				405					410					415			
Gly	Lys	Met	Tyr	Ser	Glu	Gly	Ser	Asp	Ile	Val	Pro	Gln	Ser	Asn	Glu		
		420						425					430				
Thr	Ala	Leu	His	Tyr	Phe	Lys	Lys	Ala	Ala	Asp	Met	Gly	Asn	Pro	Val		
	435						440					445					
Gly	Gln	Ser	Gly	Leu	Gly	Met	Ala	Tyr	Leu	Tyr	Gly	Arg	Gly	Val	Gln		
	450					455					460						
Val	Asn	Tyr	Asp	Leu	Ala	Leu	Lys	Tyr	Phe	Gln	Lys	Ala	Ala	Glu	Gln		
465					470					475					480		
Gly	Trp	Val	Asp	Gly	Gln	Leu	Gln	Leu	Gly	Ser	Met	Tyr	Tyr	Asn	Gly		
				485					490					495			
Ile	Gly	Val	Lys	Arg	Asp	Tyr	Lys	Gln	Ala	Leu	Lys	Tyr	Phe	Asn	Leu		
		500						505					510				
Ala	Ser	Gln	Gly	Gly	His	Ile	Leu	Ala	Phe	Tyr	Asn	Leu	Ala	Gln	Met		

```

      515              520              525
His Ala Ser Gly Thr Gly Val Met Arg Ser Cys His Thr Ala Val Glu
 530              535              540
Leu Phe Lys Asn Val Cys Glu Arg Gly Arg Trp Ser Glu Arg Leu Met
545              550              555              560
Thr Ala Tyr Asn Ser Tyr Lys Asp Gly Asp Tyr Asn Ala Ala Val Ile
      565              570              575
Gln Tyr Leu Leu Leu Ala Glu Gln Gly Tyr Glu Val Ala Gln Ser Asn
      580              585              590
Ala Ala Phe Ile Leu Asp Gln Arg Glu Ala Ser Ile Val Gly Glu Asn
      595              600              605
Glu Thr Tyr Pro Arg Ala Leu Leu His Trp Asn Arg Ala Ala Ser Gln
      610              615              620
Gly Tyr Thr Val Ala Arg Ile Lys Leu Gly Asp Tyr His Phe Tyr Gly
625              630              635              640
Phe Gly Thr Asp Val Asp Tyr Glu Thr Ala Phe Ile His Tyr Arg Leu
      645              650              655
Ala Ser Glu Gln Gln His Ser Ala Gln Ala Met Phe Asn Leu Gly Tyr
      660              665              670
Met His Glu Lys Gly Leu Gly Ile Lys Gln Asp Ile His Leu Ala Lys
      675              680              685
Arg Phe Tyr Asp Met Ala Ala Glu Ala Ser Pro Asp Ala Gln Val Pro
      690              695              700
Val Phe Leu Ala Leu Cys Lys Leu Gly Val Val Tyr Phe Leu Gln Tyr
705              710              715              720
Ile Arg Glu Thr Asn Ile Arg Asp Met Phe Thr Gln Leu Asp Met Asp
      725              730              735
Gln Leu Leu Gly Pro Glu Trp Asp Leu Tyr Leu Met Thr Ile Ile Ala
      740              745              750
Leu Leu Leu Gly Thr Val Ile Ala Tyr Arg Gln Arg Gln His Gln Asp
      755              760              765
Met Pro Ala Pro Arg Pro Pro Gly Pro Arg Pro Ala Pro Pro Gln Gln
      770              775              780
Glu Gly Pro Pro Glu Gln Gln Pro Pro Gln
785              790

```

<210> 2031

<211> 662

<212> DNA

<213> Homo sapiens

<400> 2031

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atcatcgaaa gcagcgcccg ccagcaggat tcgatttctc gccaaactgac ccagcagttc
60
atcagccaat ggcaggcggc tcacccggcg gatcagatca ccgtgctga cgtggcgctg
120
aaccccgctgc cgcacctgga cagcatctg ctcggcggtt ggatgaaacc tgccgaacag
180
cgcagcgaga tcgaacaggc ttccctggac cgctccaatc aattgaccga cgaattgctc
240
gccgcccagc tgctggtgat ggctgcaccg atgtacaact tcgctatccc cagcaccctc
300
aaagcctggc tggaccacgt gttgcgtgcc ggtgtgacct tcaagtacac cgccaccggc
360

```

ccccagggat tgctgcacgg caagcgcgcg attgtgctga ccgctcgcgg cggcattcat
 420
 accggcgcca gctccgatca ccaggaaccg tacctgcgcc aggtcatggc ctttatcggg
 480
 attcatgacg tcacgttcat tcatgccgaa ggggtgaact tgagcgggta cttccaggaa
 540
 aaaggcctta accacgccaa ggcgttgctg gcgcaacttg tggcatgaac cgagtcaacg
 600
 gttaatcgtc acataatcgc cgggtgttta tategcttca cgcaaaccct tcaagtacgc
 660
 gt
 662

<210> 2032

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2032

Ile	Ile	Glu	Ser	Ser	Ala	Arg	Gln	Gln	Asp	Ser	Ile	Ser	Arg	Gln	Leu
1				5					10					15	
Thr	Gln	Gln	Phe	Ile	Ser	Gln	Trp	Gln	Ala	Ala	His	Pro	Ala	Asp	Gln
			20					25					30		
Ile	Thr	Val	Arg	Asp	Val	Ala	Leu	Asn	Pro	Val	Pro	His	Leu	Asp	Thr
		35					40					45			
His	Leu	Leu	Gly	Gly	Trp	Met	Lys	Pro	Ala	Glu	Gln	Arg	Ser	Ala	Ile
	50					55					60				
Glu	Gln	Ala	Ser	Leu	Asp	Arg	Ser	Asn	Gln	Leu	Thr	Asp	Glu	Leu	Leu
65					70					75				80	
Ala	Ala	Asp	Val	Leu	Val	Met	Ala	Ala	Pro	Met	Tyr	Asn	Phe	Ala	Ile
				85					90					95	
Pro	Ser	Thr	Leu	Lys	Ala	Trp	Leu	Asp	His	Val	Leu	Arg	Ala	Gly	Val
			100					105					110		
Thr	Phe	Lys	Tyr	Thr	Ala	Thr	Gly	Pro	Gln	Gly	Leu	Leu	His	Gly	Lys
		115					120					125			
Arg	Ala	Ile	Val	Leu	Thr	Ala	Arg	Gly	Gly	Ile	His	Thr	Gly	Ala	Ser
	130					135					140				
Ser	Asp	His	Gln	Glu	Pro	Tyr	Leu	Arg	Gln	Val	Met	Ala	Phe	Ile	Gly
145					150					155				160	
Ile	His	Asp	Val	Thr	Phe	Ile	His	Ala	Glu	Gly	Val	Asn	Leu	Ser	Gly
			165						170					175	
Asp	Phe	Gln	Glu	Lys	Gly	Leu	Asn	His	Ala	Lys	Ala	Leu	Leu	Ala	Gln
		180					185						190		
Leu	Val	Ala													
		195													

<210> 2033

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2033

aaattttaaa acggtcatca tttaacaggc gaagctgtaa aacgcagtct tgaagaggga
 60

atgaaaaaaaa gtgatttggt aaaaggatca cttcctatca aatcaatcaa cgctcatgga
 120
 caaaaagtca caatcaatac taaagaacct tatccagaat taaagtctga actcgcaagc
 180
 ccatttgctg ctatatacga cacaaaagct aaaaacaaag taactgatca acctgttggt
 240
 acgggtcctt atcaaattga cagttataaa cgttcgcaaa aaatcgtatt aaaacaattc
 300
 aaagactact ggcaagggtac gccaaaatta aaaagaatta atgtcactta tcatgaagat
 360
 ggtaatantc gtgttgatca
 380

<210> 2034
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2034
 Met Lys Lys Ser Asp Leu Leu Lys Gly Ser Leu Pro Ile Lys Ser Ile
 1 5 10 15
 Asn Ala His Gly Gln Lys Val Thr Ile Asn Thr Lys Glu Pro Tyr Pro
 20 25 30
 Glu Leu Lys Ser Glu Leu Ala Ser Pro Phe Ala Ala Ile Tyr Asp Thr
 35 40 45
 Lys Ala Lys Asn Lys Val Thr Asp Gln Pro Val Gly Thr Gly Pro Tyr
 50 55 60
 Gln Ile Asp Ser Tyr Lys Arg Ser Gln Lys Ile Val Leu Lys Gln Phe
 65 70 75 80
 Lys Asp Tyr Trp Gln Gly Thr Pro Lys Leu Lys Arg Ile Asn Val Thr
 85 90 95
 Tyr His Glu Asp Gly Asn Xaa Arg Val Asp
 100 105

<210> 2035
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 2035
 ngaattcctt tactgcttgc aacacaggcc caagctactc gcagccatga tacttctctgt
 60
 cttcacttct ttcattgtatg tatgtatgta tgtatgtatg tatgtatgta tgtatgtatg
 120
 tatgctntaa tgttcccctt tcattctcgca tgtctccact tctgctgcta ttgctgttac
 180
 ttgtgtgttg gtgcacctaa tgggtgtccca tatttctctg atgctgtggt catttttctt
 240
 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagttc
 300
 actgggtgctt ttgcctgccg gctctaattt actgttatcc ctttagtga aattttttct
 360
 ttttttctct tctcattcca gttattatac agaactattc aacttcaaga tttgtggggt
 420

tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctcctca
 480
 acttggggga acctt
 495

<210> 2036
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2036
 Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr' Arg Ser His
 1 5 10 15
 Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met
 20 25 30
 Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His
 35 40 45
 Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly
 50 55 60
 Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu
 65 70 75 80
 Asp Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser
 85 90 95
 Leu Tyr

<210> 2037
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2037
 acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggag cacacagacg
 60
 ggaagagtga gggtggagtg cctttcccg cgtcatcttc cgtccccact ccacgcccag
 120
 caaatccaaa caccgcggcc tctggtggcc cgggcttcca tttcccctgg aggggcaagg
 180
 gcgtttcctc ttccgcccac cggggcgct gagcggcggg aacagcggcg ggggctttgt
 240
 ggtcccgggg ggtccgagtg tgtgtcaggg gctggggcgg gggatgggag cggcccctgg
 300
 gtatccctca cggtcctggt tcatgag
 327

<210> 2038
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2038
 Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys
 1 5 10 15
 Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln

```

      20      25      30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35      40      45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50      55      60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65      70      75      80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
      85      90      95
His Glu

```

<210> 2039
 <211> 307
 <212> DNA
 <213> Homo sapiens

```

<400> 2039
accggtgac cactctgcga aagcggccgc gagcgaagcg ttcttggtct tcttcgagat
60
cgcgatgtat tgcccggaaa acagcggcctt gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttggca tacatgtcgg ccatcgtcgt cagccagagt
300
aacgcgt
307

```

<210> 2040
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 2040
Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1      5      10      15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
20      25      30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
35      40      45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
50      55      60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65      70      75      80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
85      90

```

<210> 2041
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2041

nnccgcgat gcagggattc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcctc
 60
 gccagcttcc tgccgttcgc cagacgcac gccgagggcg ggggtgcgcaa ttcgctcgcc
 120
 cagctgggtcg ccaagctgac cctgcccggc atgcccgcaca tctaccaggg ctgcgagatg
 180
 tgggacctca gcctgggtcga ccggggacaat cgccgccccg tcgactacga gacacgcgac
 240
 gcggccctgg ccgggtgggt cgcgaccccg ccggaggaac gcgccgcggc gctgcgcacc
 300
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt
 348

<210> 2042

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2042

Xaa	Arg	Arg	Cys	Arg	Asp	Ser	Pro	Ala	Met	Arg	Ser	Asn	Pro	Ala	Arg
1				5					10					15	
Gly	Ala	Phe	Leu	Ala	Ser	Phe	Leu	Pro	Phe	Ala	Arg	Arg	Ile	Ala	Glu
			20					25					30		
Ala	Gly	Val	Arg	Asn	Ser	Leu	Ala	Gln	Leu	Val	Ala	Lys	Leu	Thr	Leu
		35				40						45			
Pro	Gly	Met	Pro	Asp	Ile	Tyr	Gln	Gly	Cys	Glu	Met	Trp	Asp	Leu	Ser
	50				55						60				
Leu	Val	Asp	Arg	Asp	Asn	Arg	Arg	Pro	Val	Asp	Tyr	Glu	Thr	Arg	Asp
65				70						75				80	
Ala	Ala	Leu	Ala	Gly	Trp	Val	Ala	Thr	Pro	Pro	Glu	Glu	Arg	Ala	Ala
			85					90					95		
Ala	Leu	Arg	Thr	Leu	Leu	Thr	Asp	Trp	Arg	Ser	Gly	Ala	Val	Lys	Leu
		100						105					110		
Ala	Val	Thr	Arg												
		115													

<210> 2043

<211> 712

<212> DNA

<213> Homo sapiens

<400> 2043

gatctgacgg tctcgactaa gcctgaccat tccgaggtca ccgacgccga ccttgccgctc
 60
 gaagattcgg tgcgagagc cctgtctcga atgcgctccc gggatgccgt ccacggcgag
 120
 gaacgtgccg ataccgggga tggacccccg cggtggatca ttgatccgat cgacggcact
 180
 gcgaattttc tgcggtgggt ccagtggtgg gccaccctca ttgccctcag cgtcgaggac
 240
 cagattgtcg catctgtggt ctctgctcct gccctcaagc gacgctgggt ggcagcccgt
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
 360
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc
 420
 ggacgagggc acgggttcgg tgaactcatg cggtcggtgt ggcggacccg agccttcggc
 480
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa
 540
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggttaagttc
 600
 accggtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatggtttc
 660
 cttcatgacc aggccttagc catggtccag cctcaggagt gagcaccgat cg
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5					10					15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
			20					25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly	
		35				40					45				
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
	50					55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70					75					80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90					95		
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100				105						110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115				120					125				
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
	130					135					140				
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145				150					155					160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165						170				175		
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180					185					190			
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
		195				200					205				
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
	210				215						220				
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

<210> 2045

<211> 406

<212> DNA

<213> Homo sapiens

<400> 2045

```

nnttggacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg
60
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttggg agaaaccggt caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc
240
gagatcgctg cgatgactgg cgacggtgtc aacgacgccc cctcgtctaa ggcggcccat
300
atcggtgtcg ccatggacaa acgcggcacc gacgtcgcg cgcaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcggtcc ggctcg
406

```

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
1      5      10      15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
20     25     30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
35     40     45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
50     55     60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
65     70     75     80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
85     90     95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
100    105    110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
115    120    125
Ile Val Gln Ser Val Arg Leu
130    135

```

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

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aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
60
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

```

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt
 180
 gccggatggg gcactcgggc agagagacca gacgagctgg caaaacagtg atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggt gagtttagcc tcagtgttgg
 360
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtgc
 480
 tggttttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct ggggtctcagg aacttggaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaaagtg gagggctctga
 720
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5					10					15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35					40					45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
	50				55						60				
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65					70					75				80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
				85					90					95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100					105					110		
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115					120					125			
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130					135					140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150					155					160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgcgctcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgctcg
 60
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg
 120
 gccaacgctc ccccgccaat cgccctgggc ctgttagtag tcgccattag cggcccttca
 180
 gcctacggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgcccattgt
 240
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc
 300
 gtcggccgat ggcgcacgct gacccactac ctgctgccgg cgctctctgc tcccctgctg
 360
 cgccacgcca tgttgctct gccgggcatt gcgctggcgc tggcggcctt gggttttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgcct
 480
 tatctgaac gggcgccctg gggagtcctg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
		35					40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
				85					90					95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115					120					125			
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro	
	130					135				140					
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
				165					170						

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

gagcaaaact atcgttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat
60
aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt
120
atztatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat
180
tgggtagatg atggtgggga attagatgat tgtgctgttt tatatcgtag taatagccaa
240
tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg
300
atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttttaattaat
360
aatcgtcaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t
411

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1				5				10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
		20					25					30			
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
	35					40					45				
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
	50				55					60					
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70					75					80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90						95	
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
		100					105						110		
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
	115					120						125			
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
	130					135									

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc
60
ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgccgaggg cccgactccg caaaccagc accagctgaa ggccctgtgc
 240
 tccctggctg cagaggggtat gtggacagac acatttgagt tttgtga
 287

<210> 2054
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 2054
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
 1 5 10 15
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
 20 25 30
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
 35 40 45
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
 50 55 60
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
 65 70 75

<210> 2055
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 2055
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt ggggtactgat
 60
 tcccacacca ccatggaaaa tgggtcttggc attctgggct ggggcgtcgg tggattgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggtttt
 180
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttggtct taccattact
 240
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2056
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
 1 5 10 15
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
 20 25 30
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln
 35 40 45
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

50 55 60
 Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
 65 70 75 80
 Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
 85 90 95
 Gly Gly Ser

<210> 2057
 <211> 569
 <212> DNA
 <213> Homo sapiens

<400> 2057
 acgcgtccccg acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
 60
 gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
 120
 caaaatctag ttggaccaa caacgccag tatggctggt atctagcctt tggtgatata
 180
 ttcattggtct tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt
 240
 ttggatatca cagaagccac tactacaact tcttacaccc aagatggaac gacctttaaa
 300
 agagaaacct tctcaagtta cctgatgat gttactgtta ctacttgac caaaaaggg
 360
 gacaaaaaac ttgattttac agtttggaa agcttaacag aagatttact tgctaacgga
 420
 gactactcag cggaatatc taactacaag agtggccatg ttacgacaga cccaaatggt
 480
 atctactaa aaggtacagt caaagataat ggctccagt tcgcatacta tctaggaatt
 540
 aaaacggacg gaaaagttac tgttcatga
 569

<210> 2058
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 2058
 Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
 1 5 10 15
 His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr
 20 25 30
 Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
 35 40 45
 Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
 50 55 60
 Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
 65 70 75 80
 Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
 85 90 95
 Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

	100		105		110										
Phe	Ala	Ser	Tyr	Leu	Gly	Ile	Lys	Thr	Asp	Gly	Lys	Val	Thr	Val	His
	115						120					125			

<210> 2059
 <211> 644
 <212> DNA
 <213> Homo sapiens

<400> 2059
 gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc
 60
 agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc
 120
 cgcaaccgcc tgcgcttcca agcctgcagc gacgtaagag gccctctcac aactgaacc
 180
 gatcgctcca gacaacgtgg aagcgataac ctcgcgtcgc ttctgctgat tctgggcaa
 240
 gctcgacaag aagaaccgca gaggggagc ggcctgggtca gggagcgcac cttcagcgtt
 300
 cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
 360
 tcggccgagg tccgccggtta cctctctcat ggcttcaca ggaacgcggt cacacaccac
 420
 cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
 480
 gtagcgggct gctgaggtga caaagatcca cagatccgag gcctggagca actgagccgc
 540
 cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcacgcagga tggccaaacc
 600
 tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
 644

<210> 2060
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2060
 Met Arg Glu Val Pro Ala Asp Leu Gly Arg Leu Met Thr Glu Arg Gly
 1 5 10 15
 Leu Ala Asp Ser Pro Leu Phe Ala Val Pro Glu Thr Lys Thr Asn Ala
 20 25 30
 Glu Gly Ala Leu Pro Asp Gln Ala Val Ala Pro Leu Arg Phe Phe Leu
 35 40 45
 Ser Ser Leu Ala Gln Asn Gln Lys Arg Arg Glu Val Ile Ala Ser
 50 55 60
 Thr Leu Ser Gly Ala Ile Gly Ser Val Cys Glu Arg Ala Ser Tyr Val
 65 70 75 80
 Ala Ala Gly Leu Glu Ala Gln Ala Val Ala Ala Ser Arg Leu Tyr Glu
 85 90 95
 Asp Ala Gln Ser Ile Met Ala Glu Ser Tyr Arg Ser Ile Ala Ala Gln
 100 105 110
 Ser Ala Asp Gly Thr Leu Leu Arg Gly Glu Val Leu Ala Arg Trp His

115
Glu Phe
130

120

125

<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens

<400> 2061
gttaacctgg taaggagagc gacacaggaa ggtgcagggg ttgccatggt gtggccccag
60
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
120
acgcgcgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctggggggctc
180
acgggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggc
240
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
300
tgccacacgc accaggtcct gactgggagt cgggccccca gggcctgtgg atggctggcc
360
tgggcccagc ctccgcccc aaggggtgctg gcacctggca tgtgcccac agttggggcc
420
ggctgggtggg aaggtgtgtg tcaggtggcg gagcctcggt gccaggatct cactcacgcg
480
t
481

<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens

<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
1 5 10 15
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
20 25 30
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
35 40 45
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
50 55 60
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
65 70 75 80
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe
85 90 95
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
100 105 110
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
115 120 125
Leu Leu Thr Arg Leu
130

<210> 2063
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2063
 gccggcgccg tcgagcgcggt gccttttcaat atcgaggccc aagacatgggt gctgctcatc
 60
 gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc
 120
 atcgacgccc tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac
 180
 tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgcgcggt gcaccacgtg
 240
 gtggaagaaa ccaaccggac cctagatgcc gctaccgcg cggcatcttc cgatctagat
 300
 acattccggc ggcttatgcg cgagagccac atctccctgc gcgaccttta tgaggtcacc
 360
 actccggagc tcgactccgt ttttaccgcg gccggcgagc tgggcgctcg catgannnn
 419

<210> 2064
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2064
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
 1 5 10 15
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
 20 25 30
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
 35 40 45
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
 50 55 60
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Arg Val His His Val
 65 70 75 80
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
 85 90 95
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
 100 105 110
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
 115 120 125
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
 130 135

<210> 2065
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 2065
 gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccgg cgcaaagggtg
 60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg cettactttc
 120
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccga cgccgacgtg
 180
 cttctcgaac tcgggtggtga ggatgccaaag atcacctacc ttaagccggt ccccgaacag
 240
 cgcataaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacaccg acactcccgg cctcaatgac ctgcacatccc gagccaagac catccatccg
 360
 atcgccctgc gctgtggtgt ttttgccaag tccgaccttc agcccctcat taacgagggg
 420
 gcccgccacg aggatctggc tgcctcggtc ctgcaggctg tcgccactca gtgcattgcc
 480
 ggccctggcat gtggtcgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcac
 540
 tttatgccaa gtttgcgaga cgctttctcg cgcgtcctcg acggttaaggt tgacgcgt
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1				5				10						15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40					45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
			50			55				60					
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85					90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105					110		
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
			115				120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
			130			135					140				
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150					155				160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
				165					170					175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185					190		
Leu	Asp	Gly	Lys	Val	Asp	Ala									
															195

<210> 2067

<211> 366

<212> DNA
<213> Homo sapiens

<400> 2067
ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac
60
aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg
120
tacttcgggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
180
ccgatcggtt acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
240
gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgga caaggacatc
300
gtcaacttcc acgccctgtt ctggccggcg atgctcgaag gctcggggcta ccgtaaaccg
360
accggt
366

<210> 2068
<211> 122
<212> PRT
<213> Homo sapiens

<400> 2068
Phe Gln Gln Met Leu Gln Thr Trp Thr Arg Ser Gly Thr Leu Gln Glu
1 5 10 15
Ala Val Ala Asn Lys Ile Ala Glu Trp Leu Asp Ala Asp Leu Gln Gln
20 25 30
Trp Asp Ile Ser Arg Asp Ala Pro Tyr Phe Gly Phe Glu Ile Pro Gly
35 40 45
Glu Pro Gly Lys Tyr Phe Tyr Val Trp Leu Asp Ala Pro Ile Gly Tyr
50 55 60
Met Ala Ser Phe Lys Asn Leu Cys Asp Arg Thr Pro Glu Leu Asp Phe
65 70 75 80
Asp Ala Phe Trp Ala Lys Asp Ser Thr Ala Glu Leu Tyr His Phe Ile
85 90 95
Gly Lys Asp Ile Val Asn Phe His Ala Leu Phe Trp Pro Ala Met Leu
100 105 110
Glu Gly Ser Gly Tyr Arg Lys Pro Thr Gly
115 120

<210> 2069
<211> 280
<212> DNA
<213> Homo sapiens

<400> 2069
cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg
60
catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt
120
gcctttggct ggaattccac cccagccttc ttgcctcaag aacgcccttc cccttcaga
180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctcgatcaag ctttgggtcaa gctcctaccc
 280

<210> 2070
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2070
 Met Val Glu Thr Val Arg Val Gln Gly Val Pro Glu Pro Ser Leu Gly
 1 5 10 15
 Cys Met Gly Pro Arg Arg Arg Pro Ser Leu Gln Thr Trp Ala His Pro
 20 25 30
 Ala Pro Val Leu Leu Pro Leu Ala Gly Ile Pro Pro Gln Pro Ser Cys
 35 40 45
 Leu Lys Asn Ala Leu Pro Pro Ser Asp Leu Met Gly Thr Gly Pro Val
 50 55 60
 Phe Leu Asn Gly Val Arg Ala Pro Ser Asn His Asp Lys Asp Pro Leu
 65 70 75 80
 Leu Asp Gln Ala Leu Val Lys Leu Leu Pro
 85 90

<210> 2071
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2071
 acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat
 120
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggagggttg caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac
 360
 aatatgttca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2072
 Met Thr Leu Ser Pro Leu Thr Ser Asp Ala Gly Ala Phe Tyr Phe Leu
 1 5 10 15
 Cys Gln Thr Leu His Met Lys His Phe Trp Asn Asn Tyr Arg His Asp

```

                20                25                30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
                35                40                45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
                50                55                60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
65                70                75                80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
                85                90                95
Ser Thr Leu Arg
                100

```

<210> 2073
 <211> 339
 <212> DNA
 <213> Homo sapiens

```

<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggtgceet gcgttccttg gctcgtggcc
60
ccttcctcca ccttcaagcc agcagcggag gctgagtcct ttctcatgcc atctctctgt
120
tctctctcct gcctcctcct ccacactgaa ggacccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

```

<210> 2074
 <211> 85
 <212> PRT
 <213> Homo sapiens

```

<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1                5                10                15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
                20                25                30
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
                35                40                45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
50                55                60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
65                70                75                80
Gly Thr Glu Val Asp
                85

```

<210> 2075
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 2075

```

ntggccagggt tgacctcaaa ggtgtacatt gttttatgtg gcgacaatgg actgtcagaa
60
accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
120
atcctgagcg ctccctgcca actgggcctg ctgaggaaga tccgcctctg gcacgacagc
180
cgtgggcctt ccccaggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
240
cagggctggg tcttccctgc ccagtgtctg ctgtctgccg gcaggcatga tggtcgcgtg
300
gagcgggagc tcacctgtct gcaaggggga ctcggcttct ggaagctttt ctattgcaag
360
ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctcctcc
420
agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtctgtg cgtctacgcg
480
t
481

```

<210> 2076

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2076

```

Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn
1           5           10           15
Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe
20           25           30
Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu
35           40           45
Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser
50           55           60
Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly
65           70           75           80
Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His
85           90           95
Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly
100          105          110
Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe
115          120          125
His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu
130          135          140
His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Leu Cys Val Tyr Ala
145          150          155          160

```

<210> 2077

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 2077

```

ncagagtgtt ttgagctatc tggatatccca aatgatgtga atacttttcag aaaccaatgg
60
caaattgaac ccaactgttt gcgaattcgg cagcagtaaa gatctttttt ttttttttgt
120
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct
180
ctttggtcta cagtgagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg
240
agtccaggag ccttaggaag gctgaaacaa gccctgacca gcaggcttag ttgtcctgag
300
aagagccagt gaggccacct ggtccagttc accagggttc ccagggaagc acaggcatct
360
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag
420
ggcagcatgg gaaaggctca gactgcaggt tcatccccga ggatggtaag gacacgtgct
480
cctccctcgc aagagcagggc ttgtgcacag cccggcacag ggccagccag ggcggccccct
540
gcggctgtgc agcgcttacc agggggagga gttcagccat caggacctt tccaagtgga
600
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg
660
tgctggagta gacaagcagc tgggnnggct ccatgcagggc tccgctctac cccacagga
720
cggcgaggct ccggggggcc tnnccccaca gacatggtct tggtggtgt tccgccaccg
780
ctgcacgcag ctctgcagc ctgtgcagac actggccac catggcctgc agcccccca
840
gcgtgagcag gcagcgttac tcctgcatcc agtccatggg ggctgctgag agctcctccc
900
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg cccgcctcc gcctccacct
960
ccacagcact gagcctgggc tggggccccgc ctgaagctgt ctgcatgttc tggaggaact
1020
gggttttggc agcggcggca tccgtggaat cactggtctg tgtggaactg agctgggccc
1080
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcagggtgcc
1140
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgct
1200
ggtccctgag gcccgcacca ggcctggggg ttcgggctcc catcccaaca cgggtcccat
1260
ccccactga cagcagccgg cgctcagggt ggcccttggc aggcaccgtg gtctggcgga
1320
ggcccttggg gggctctgtg tctgaagcat ggccaccagc ttggcctggg gaatgcggtg
1380
gggcggaggg tgctgtgcca gaagaggtga
1410

```

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
 60
 gtactggcgg tcaaatecta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtgggggtac ctggtgaccc aagagttgcg gcgcctgatg
 240
 ggcaaacctt cttccgctgg ccgcgttcaa tcacccgccg tgtttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcagggtgatc aatcactttg gcgtgcgtct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga tttcgcaagc
 420
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat
 480
 gtggtcgtgg agtcttgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc
 540
 tcattccactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg


```

      35              40              45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50              55              60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65              70              75              80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
      85              90              95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
      100              105              110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
      115              120              125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
      130              135              140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
      145              150              155              160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
      165              170              175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Gln Ala Ala
      180              185

```

<210> 2081
 <211> 319
 <212> DNA
 <213> Homo sapiens

```

<400> 2081
aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
60
aggttccatc atcaacgggt tccactagta attttggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgctacaca acttgetcag aggctcaatt tgctaatgt tttgcagacg
180
gacatggtgt atgagctgct gcggacatca acagatgcgc cacttacttc agttcctgtg
240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagcga agggtttgg
319

```

<210> 2082
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 2082
Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1              5              10              15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
      20              25              30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
      35              40              45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
      50              55              60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```
<210> 2085
<211> 478
<212> DNA
<213> Homo sapiens
```

<400> 2085

nnggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctacccgcac
 60
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa
 120
 atccggcgtc gcgtggagga agccgccgaa ctctctgacc tcaccgacta tctggaccgc
 180
 aaaccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgctattgtt
 240
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt
 300
 gtccgcaccc gcgcccagat tgcggaactg cagcgcgcgc tgggcaccac caccgtttat
 360
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc
 420
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgcg taacgcgt
 478

<210> 2086

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2086

Xaa	Asp	Pro	Lys	Asp	Arg	Asp	Ile	Ala	Met	Val	Phe	Gln	Asn	Tyr	Ala
1				5					10					15	
Leu	Tyr	Pro	His	Met	Thr	Val	Ala	Asp	Asn	Met	Gly	Phe	Ala	Leu	Lys
			20					25					30		
Leu	Ala	Lys	Val	Asp	Lys	Lys	Glu	Ile	Arg	Arg	Arg	Val	Glu	Glu	Ala
		35					40					45			
Ala	Glu	Leu	Leu	Asp	Leu	Thr	Asp	Tyr	Leu	Asp	Arg	Lys	Pro	Lys	Ala
	50					55					60				
Leu	Ser	Gly	Gly	Gln	Arg	Gln	Arg	Val	Ala	Met	Gly	Arg	Ala	Ile	Val
65				70						75				80	
Arg	Ser	Pro	Arg	Val	Phe	Leu	Met	Asp	Glu	Pro	Leu	Ser	Asn	Leu	Asp
			85					90					95		
Ala	Arg	Leu	Arg	Val	Arg	Thr	Arg	Ala	Gln	Ile	Ala	Glu	Leu	Gln	Arg
		100						105					110		
Arg	Leu	Gly	Thr	Thr	Thr	Val	Tyr	Val	Thr	His	Asp	Gln	Val	Glu	Ala
	115					120						125			
Met	Thr	Met	Gly	Asp	Arg	Val	Ala	Val	Leu	Cys	Ala	Gly	Lys	Leu	Gln
	130					135					140				
Gln	Val	Asp	Thr	Pro	Arg	Asn	Leu	Phe	Asp	His	Pro	Ala	Asn	Ala	
145					150					155					

<210> 2087

<211> 731

<212> DNA

<213> Homo sapiens

<400> 2087

gataattctc tacacggcat gagctgggga cgtacccccc ttgccaacgt cacctcacgg
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct
 180
 ggtcggatca atcgcagcaa tcacccctc cccagggcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
 300
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccgggtgc gttggttaag
 360
 gctggattta gttccgccga cgcgggtggct ctacgcgccg gtattgccag agaaatggca
 420
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtgggtcgcaa atcttgtcgc cgccgggtctg acaagaagtt ggcaaaggct acggctgtcg
 660
 ccattgccgc aactgcgctc aatcccgcgc tcggggccgat cgcaaagact gaggccatta
 720
 aggctgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5				10					15		
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
		20					25					30			
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
		35				40					45				
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
	50				55					60					
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65			70					75				80			
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
			85			90						95			
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
		100				105									

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accaggctca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta gccatcatc
 120
 ttgcacaccg accacttcga ggggtacgag cgccccgcc tcgtgctgca cgaagtcacc
 180
 gatcaacttg gccaaagcgtt ccttggtattg gaaggcccag agccggctct cggctgggaa
 240
 tcgttggtgg cgtctctcac gagtcttgtc gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccc
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1				5					10					15	
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25					30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
		35				40					45				
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50				55						60				
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65				70					75					80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85					90						95	
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
		100					105								

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

actcttgacc attgtctctg tctctgcgtt tttctctctg tctctctgtg tctctgtctc
 60
 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng
 120
 agtctctgtc tcttttgtct ctgtctctct ctgtgtctct gccatttttg gtctctgtct
 180
 tctttctctt gtgtgtctct ccatttctgt ctctcttctt ctgtctctct ccatttctgt
 240
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccatttctgt cccttcacgc gt
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
      20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
      35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
      50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
      85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
      100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctaccgcgc agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcgttct ttggcggcgt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttcctggc gttggctaata
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttcgcaacat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1             5             10             15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
      20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
      35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
      50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```

85 90 95
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
 100 105

<210> 2095
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 2095
 cccgtcacag accaggaaga agcagacaat atgatcgctt ctttcgacac ttatgttcgc
 60
 accctgcccc ccgccgcaa tcttctgctt aaacaattcc atattgtgga tgttgcccg
 120
 cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc
 180
 aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat
 240
 gggaaactgc cggatgcttt ttcggaactg tccgctgggg actcctccgg gtcctcccc
 300
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag
 360
 attctgcagg ccactcggg tccgctgctg ggggtggacgc gt
 402

<210> 2096
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2096
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp
 1 5 10 15
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Ala Asn Leu Leu Leu Lys Gln
 20 25 30
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
 35 40 45
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
 50 55 60
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
 65 70 75 80
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
 85 90 95
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
 100 105 110
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
 115 120 125
 Leu Leu Gly Trp Thr Arg
 130

<210> 2097
 <211> 641
 <212> DNA
 <213> Homo sapiens

<400> 2097

ncgttttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc ccctcccagag
 60
 gcggagcagg cgtggccgca gagcagcggg gaggaggagc tgcagctcca gctggccctg
 120
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc
 180
 caccgcctc cagcctcac ttcaggctcc ctcccagcca ggctggggcc tggccctcac
 240
 tgctgctgct ccacatgctg tcaactgtct cctccccagt cctgcctcat cctcacnccg
 300
 ccgtccctct gcgtgtcact ctctgcctgt cctcactggt tcagggaccc ccagcctctc
 360
 tttattcggc tctatctgac cctggctctg cctctgactc tgcctctggc ccctcccgtc
 420
 atgccctca cactctctct ccccagccc ccgtcctgcg gcccagagga cgacgcccag
 480
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
 540
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<210> 2098

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2098

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Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35					40					45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
	50					55					60				
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65					70				75					80	
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
				85					90					95	
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
			100					105					110		
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
	115					120					125				
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
	130					135					140				
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145				150					155					160	
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
			165					170						175	
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

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 <211> 347
 <212> DNA
 <213> Homo sapiens

<400> 2099
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 <212> PRT
 <213> Homo sapiens

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 Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
 35 40 45
 Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
 50 55 60
 Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
 65 70 75 80
 Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
 85 90 95
 Ser Ser Pro Leu Ala His Pro Thr Trp Pro
 100 105

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 <211> 549
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

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Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
		35					40					45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50					55					60				
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65					70					75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85						90					95	
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
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Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

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 180

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<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

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His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
	50					55				60					
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
				85					90					95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115					120					125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
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Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
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<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

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			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
			35				40					45			
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
		50				55					60				
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65					70					75				80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
				85				90						95	
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
		115					120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
		130				135					140				
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145				150						155				160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
				165					170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
		195				200						205			
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
	210					215					220				
Ala	Gln	Asp	Thr	Glu	Leu	Ser	Ala	Gly	Thr	Gly	Asn	Phe	Tyr	Leu	Val

1579

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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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Asp	Asn	Pro	Arg	Thr	Phe	Ser	Arg	Arg	Pro	Pro	Ala	Gln	Ala	Ser	Arg
			20					25					30		
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro
		35					40					45			
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr
		50				55					60				
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met
65					70					75				80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu
				85					90					95	
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp
			100					105					110		
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val
		115					120					125			
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile
		130				135					140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln
145					150					155					160
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg
			165						170					175	
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val
		180						185					190		
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro
		195					200					205			
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe
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<210> 2111
 <211> 339
 <212> DNA
 <213> Homo sapiens

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<210> 2112
 <211> 113
 <212> PRT
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<400> 2112
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 35 40 45
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
 50 55 60
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
 65 70 75 80
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<210> 2113
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 <212> DNA
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 180

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g a g c c t g c c c t g t a c c c a t g c t g c a g c c a c t g g a g c t t c c c t a c a a g c a a g a g a t t t t t
360
g a a c t g t g c a t c a a g a g a g c t a t c a t g g a g c t g g a a a g g a g t a c a g g g t a c c a t t t g g a t
420
a g c a a a a c c c c a g g g c c g a g g t t t g a t a t c a a t g a t a c t a t c a g g g c a g t g g t g t t a g a g
480
t t c c a g a g t a c c t a c c t c t t c a c a c t g g g t t a t g a a a a g a t g c a t c a g t t t t a t a a a g a g
540
g t g g a c t c g t g g a t a t c c a g t g a g c t g a g t t c g g c c c c t g a a g g c c t c a g c a a t g g t t g g
600
t t t g t c a g c a a t c t g g a g t t c t a t g a c c t c c a g g a t a g c c t c t c c g a t g g c a c c c t c a t t
660
g c c a t g g g g c t g t c a g t t g c t g t t g c a t t t a g c g t g a t g c t g c t g a c a a c t t g g a a c a t c
720
a t c a t a a g c c t t t a t g c c a t c a t t t c a a t t g c t g g a a c g a t a t t t g t c a c t g t t g g t t c t
780
c t t g t c c t g c t g g g c t g g g a g c t c a a t g t g t t g g a a t c t g t c a c c a t t t c g g t t g c c g t c
840
g g c t t g t c t g t a g a c t t t g c c g t c c a t t a t g g g g t t g c c t a c c g c t t g g c t c c a g a t c c c
900
g a c c g a g a a g g c a a a g t g a t c t t c t c t c t g a g t c g c g t g g g c t c t g c g a t g g c c a t g g c t
960
g c c c t g a c c a c c t t c g t g g c a g g g g c c a t g a t g a t t c c c t c c a c a g t t c t a g c t t a c a c c
1020
c a g c t g g g c a c c t t c a t g a t g c t c a t c a t g t g t a t c a g t t g g g c t t t c g c a c c t t c t t t
1080
t t c c a g t g c a t g t g c c g g t g c c t t g g a c c a c a g g g t a c c t g t g g t c a g a t t c c t t t a c c t
1140
a a a a a a c t a c a g t g c a g t g c c t t t t c c c a t g c c t t g t c t a c a a g t c c c a g t g a c a a g g g a
1200
c a a a g c a a a a c a c a t a c c a t a a a t g c t t a t c a t t t a g a t c c a g g g g c c c a a a a t c t g a a
1260
c t g g a g c a t g a g t t t t a t g a a t a g a a c c t c t g g c t t c c c a c a g c t g c a c t g c c c c t g a g
1320
a a g a c c a c t t a t g a a g a g a c c c a c a t c t g c t c t g a a t t t t t c a a c a g c c a a g c a a a g a a t
1380
t t a g g g a t g c c t g t g c a t g c a g c t t a c a a c a g t g a a c t c a g c a a a a g c a c t g a a a g t g a c
1440
a c t g g c t c t g c c t t g t t a c a g c c c c t c t t g a a c a g c a t a c c g t g t g t c a c t t c t t c t c t
1500
c t g a a t c a g a g a t g t a g c t g c c c c g a t g c c t a c a a a c a c t t g a a c t a t g g c c c a c a c t c t
1560
t g c c a g c a g a t g g g g g a c t g c t t g t g c c a c a g t g c t c t c t a c c a c t a g c a g c t t t g t c
1620
c a g a t c c a a a a c g g c g t g g c a c c t c t g a a g g c c a c a c c a a g c t g t c g a g g g c t t t g t g
1680
c a c c c c a t c a c g c a c a t c c a c c a c t g t c c c t g c c t g c a g g g c a g a g t a a a g c c a g c c g g a
1740
a t g c a g a a t t c t c t g c c t a g g a a t t t t t t c t c c a c c c a g t g c a g c a c a t t c a g g c c c a a
1800

gaaaaaattg gcaagaccaa tgtacacagt cttcagagga gcatagaaga gcatcttcca
 1860
 aagatggcag agccatcgtc atttgtctgc agaagcactg gatcggttact caaaacgtgt
 1920
 tgcgaccccg agaataaaca aagggaactc tgtaaaaata gagacgtgag caatctggag
 1980
 agcagtggag ggactgaaaa caaggcagga gggaaagtgg agctgagctt gtcacagacg
 2040
 gatgcaagtg tgaactcaga acatttcaat cagaatgaac caaaagtcct atttaatcat
 2100
 ttaatggggg aggctggttg taggtcttgc ccaaataatt cacaaagttg tggcagaatt
 2160
 gtgagagtga agtgcaattc tgtggactgt caaatgccaa acatggaagc caatgtgect
 2220
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 2280
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 2329

<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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Leu	His	Met	Pro	Ile	Thr	Val	Ile	Trp	Gly	Val	Ser	Pro	Glu	Asp	Asn
			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
			35				40					45			
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
			50				55				60				
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65						70				75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
						85				90				95	
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
			115					120					125		
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
			130				135					140			
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
145						150				155				160	
Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
						165				170				175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
			195				200						205		
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
			210				215					220			
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

225	Ile	Ile	Ser	Leu	Tyr	Ala	Ile	Ile	Ser	Ile	Ala	Gly	Thr	Ile	Phe	Val
					245					250					255	
Thr	Val	Gly	Ser	Leu	Val	Leu	Leu	Gly	Trp	Glu	Leu	Asn	Val	Leu	Glu	
				260				265					270			
Ser	Val	Thr	Ile	Ser	Val	Ala	Val	Gly	Leu	Ser	Val	Asp	Phe	Ala	Val	
				275				280				285				
His	Tyr	Gly	Val	Ala	Tyr	Arg	Leu	Ala	Pro	Asp	Pro	Asp	Arg	Glu	Gly	
	290					295					300					
Lys	Val	Ile	Phe	Ser	Leu	Ser	Arg	Val	Gly	Ser	Ala	Met	Ala	Met	Ala	
305					310						315				320	
Ala	Leu	Thr	Thr	Phe	Val	Ala	Gly	Ala	Met	Met	Ile	Pro	Ser	Thr	Val	
				325					330					335		
Leu	Ala	Tyr	Thr	Gln	Leu	Gly	Thr	Phe	Met	Met	Leu	Ile	Met	Cys	Ile	
				340				345					350			
Ser	Trp	Ala	Phe	Ala	Thr	Phe	Phe	Phe	Gln	Cys	Met	Cys	Arg	Cys	Leu	
		355				360						365				
Gly	Pro	Gln	Gly	Thr	Cys	Gly	Gln	Ile	Pro	Leu	Pro	Lys	Lys	Leu	Gln	
	370					375					380					
Cys	Ser	Ala	Phe	Ser	His	Ala	Leu	Ser	Thr	Ser	Pro	Ser	Asp	Lys	Gly	
385					390					395					400	
Gln	Ser	Lys	Thr	His	Thr	Ile	Asn	Ala	Tyr	His	Leu	Asp	Pro	Arg	Gly	
				405					410					415		
Pro	Lys	Ser	Glu	Leu	Glu	His	Glu	Phe	Tyr	Glu	Leu	Glu	Pro	Leu	Ala	
			420					425					430			
Ser	His	Ser	Cys	Thr	Ala	Pro	Glu	Lys	Thr	Thr	Tyr	Glu	Glu	Thr	His	
			435				440					445				
Ile	Cys	Ser	Glu	Phe	Phe	Asn	Ser	Gln	Ala	Lys	Asn	Leu	Gly	Met	Pro	
	450					455					460					
Val	His	Ala	Ala	Tyr	Asn	Ser	Glu	Leu	Ser	Lys	Ser	Thr	Glu	Ser	Asp	
465					470					475					480	
Thr	Gly	Ser	Ala	Leu	Leu	Gln	Pro	Pro	Leu	Glu	Gln	His	Thr	Val	Cys	
				485					490					495		
His	Phe	Phe	Ser	Leu	Asn	Gln	Arg	Cys	Ser	Cys	Pro	Asp	Ala	Tyr	Lys	
			500					505					510			
His	Leu	Asn	Tyr	Gly	Pro	His	Ser	Cys	Gln	Gln	Met	Gly	Asp	Cys	Leu	
		515					520					525				
Cys	His	Gln	Cys	Ser	Pro	Thr	Ser	Ser	Phe	Val	Gln	Ile	Gln	Asn		
	530					535				540						
Gly	Val	Ala	Pro	Leu	Lys	Ala	Thr	His	Gln	Ala	Val	Glu	Gly	Phe	Val	
545					550					555					560	
His	Pro	Ile	Thr	His	Ile	His	His	Cys	Pro	Cys	Leu					

```

        660                665                670
Val Glu Leu Ser Leu Ser Gln Thr Asp Ala Ser Val Asn Ser Glu His
        675                680                685
Phe Asn Gln Asn Glu Pro Lys Val Leu Phe Asn His Leu Met Gly Glu
        690                695                700
Ala Gly Cys Arg Ser Cys Pro Asn Asn Ser Gln Ser Cys Gly Arg Ile
705                710                715                720
Val Arg Val Lys Cys Asn Ser Val Asp Cys Gln Met Pro Asn Met Glu
        725                730                735
Ala Asn Val Pro Ala Val Leu Thr His Ser Glu Leu Ser Gly Glu Ser
        740                745                750
Leu Leu Ile Lys Thr Leu
        755

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<210> 2115

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2115

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ttctgggtat tccagaatct ggaatggggg atgcctatcc cctcctgag cccacctgct
120
ggtcttgggt ccttgagacc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgccc agccggtggg cagctggggc ggggtggacct ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaacat gtccccatcc gtgggaagtg gagccacgtg g
461

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<210> 2116

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2116

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Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
1          5          10          15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
20          25          30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
35          40          45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
50          55          60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
65          70          75          80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

```

```

      85              90              95
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
      100              105              110
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
      115              120              125
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
      130              135              140
Thr Arg
145

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<210> 2117
 <211> 360
 <212> DNA
 <213> Homo sapiens

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<400> 2117
nnacgcgttg gggagacgac ggtgaccttc ccagcaagct catcgcagga tgaaacaatc
60
cgcgccagcg ttaagacctt ctgcgaggct gtcaccgccg atctggagaa gtgtggaccg
120
atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
acccaagagg ccttcgataa gctcaccag gagctggagt acctcaaagg cgaaggccgc
240
accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgacctttc tgagaacggc
300
ggctaccatg cgcgccgtga ggagcagggg caggccgagg cccgcatccg tcaactcgag
360

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<210> 2118
 <211> 70
 <212> PRT
 <213> Homo sapiens

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<400> 2118
Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
1      5      10      15
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
      20      25      30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
      35      40      45
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
      50      55      60
Arg Ile Arg Gln Leu Glu
65      70

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<210> 2119
 <211> 465
 <212> DNA
 <213> Homo sapiens

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<400> 2119
nacgcgtgaa gggcgcgtgt cggcctctca ctggcgcagc ctgcactgcc gctgccgcct
60

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cgcggcgccc ttgccttggc gttgtctctg gcactgtggc ggactgacca cggcccgggc
 120
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgctactc
 180
 actgttctgt ggctgttctc ctcagtaaag gccgactcaa aagccattac aacctctctt
 240
 acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagtaa gccagtcaaa atattggatc atcagatcat
 360
 gacgggtaccg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
 cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg
 465

<210> 2120
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 2120
 Met Gly Cys Lys Gly Asp Ala Ser Gly Val Cys Tyr Lys Met Gly Val
 1 5 10 15
 Leu Val Val Leu Thr Val Leu Trp Leu Phe Ser Ser Val Lys Ala Asp
 20 25 30
 Ser Lys Ala Ile Thr Thr Ser Leu Thr Thr Lys Trp Phe Ser Thr Pro
 35 40 45
 Leu Leu Leu Glu Ala Ser Glu Phe Leu Ala Glu Asp Ser Gln Glu Lys
 50 55 60
 Phe Trp Asn Phe Val Glu Ala Ser Gln Asn Ile Gly Ser Ser Asp His
 65 70 75 80
 Asp Gly Thr Asp Tyr Ser Tyr Tyr His Ala Ile Leu Glu Ala Ala Phe
 85 90 95
 Gln Phe Leu Ser Pro Leu Gln Gln Asn Leu Phe Lys Phe Cys Leu Ser
 100 105 110
 Leu His Ala
 115

<210> 2121
 <211> 336
 <212> DNA
 <213> Homo sapiens

<400> 2121
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 tgttggtctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt
 120
 ggaggttctt ttgttacaaa atacaacaag acaaactgtc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtc cgagggagat
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaaag ccctgattat attcctggtg
 300

tttctgatta ttgtgacatc aatagccttg cttggt
336

<210> 2122
<211> 112
<212> PRT
<213> Homo sapiens

<400> 2122
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser
1 5 10 15
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr
20 25 30
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr
35 40 45
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr
50 55 60
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp
65 70 75 80
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile
85 90 95
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val
100 105 110

<210> 2123
<211> 426
<212> DNA
<213> Homo sapiens

<400> 2123
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cagcaactga ccgacgaact ggaagcgatg ctctgcgcgc ccacagggtta tgacgcgac
120
tccctgcagc cgaacgctgg ctcccagggc gagtacgcgc gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgtcgc gacatctgcc tgattccgct ctctgcccac
240
ggcaccaacc cggcaaccgc caacatggcc ggcattgcgc tggtcgtgac cgcttgcgac
300
gcccgcggca acgtcgacat cgaagacctg cgcgccaagg ctatcgagca ccgcgaacac
360
ctcgcggcgc tgatgatcac ctaccgctcg acccacggcg tgttcgaaga aggcattccgc
420
gagatc
426

<210> 2124
<211> 142
<212> PRT
<213> Homo sapiens

<400> 2124
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln


```

      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

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<210> 2125
 <211> 285
 <212> DNA
 <213> Homo sapiens

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<400> 2125
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60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

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<210> 2126
 <211> 95
 <212> PRT
 <213> Homo sapiens

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<400> 2126
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      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

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<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
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 gcgacgcata ttccagggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
 120
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccttgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
 300
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgetgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
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 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2129

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 60
 ctcacgccct ttgacaagcg gcgtgatgcg aacggcggtg acgggggtggt gcgcatcggg
 120
 actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg
 180
 gtccatgatg aacggcctaa taccgtcctt cgtatctggg gcggcggccc agacgagaat
 240
 cccctcaagg tcttggctcg ccgtcttgct ccggacgggt cggtggagtt tcgcgggtgcc
 300
 attgatcatt ctgaggtcag aaatgccttg ggtagtttgg acatctttgc cgcc
 354

<210> 2130

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2130

Thr	Arg	Asp	Leu	Val	Asn	Lys	Pro	Ile	Ser	Ile	Thr	Pro	Phe	Gly	Val
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Asp	Thr	Glu	Ile	Leu	Thr	Pro	Phe	Asp	Lys	Arg	Arg	Asp	Ala	Asn	Gly
			20					25					30		
Gly	Asp	Gly	Val	Val	Arg	Ile	Gly	Thr	Ile	Lys	Ala	Leu	His	Ser	Lys
		35				40						45			
Tyr	Gly	Ile	Gly	Glu	Leu	Ile	Arg	Ala	Phe	Ser	Arg	Val	His	Asp	Glu
	50				55						60				
Arg	Pro	Asn	Thr	Val	Leu	Arg	Ile	Trp	Gly	Gly	Gly	Pro	Asp	Glu	Asn
65				70					75					80	
Pro	Leu	Lys	Val	Leu	Ala	Arg	Arg	Leu	Val	Pro	Asp	Gly	Ser	Val	Glu
			85					90					95		
Phe	Arg	Gly	Ala	Ile	Asp	His	Ser	Glu	Val	Arg	Asn	Ala	Leu	Gly	Ser
			100					105					110		
Leu	Asp	Ile	Phe	Ala	Ala										
			115												

<210> 2131

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2131

gcacgcggc cattgggttat gtgtgcctat tccattgggt atgtggaagg ttgggatcag
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 ccagacagtc attatgatgg ttgtttacag ctgggcgagt ggggctttcg aatcaatgac
 120
 ctgatgaaga cggtagaggg gcgggcaggg tgcattgagt attatgaaat gctcaacgaa
 180
 caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac
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 ctgcaagaag agcttggttt tattgtctgt gcgccacgct gggcaattgc tcgaaaattt
 300

cctgctcaag aagaagttac gcgt
324

<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
1 5 10 15
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
20 25 30
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
35 40 45
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
50 55 60
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
65 70 75 80
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
85 90 95
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
100 105

<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2133
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gtggctgtct ttagaggacc cggcgaactt ttcttgcttt tteccacttg ctccatcaca
120
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
180
accagattac atcgctgtgg atccaaccct gcatttttctt gccctctctt tactgcgagt
240
gtcacctcta cccggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
1 5 10 15
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
20 25 30
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
35 40 45
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50	55	60
Asn Pro Ala Phe Ser Cys Pro Ser Phe Thr Ala Ser Val Thr Ser Thr		
65	70	75
Arg Lys Gly Leu Gln Pro Pro Ser Phe Pro Val Ile Tyr		
85	90	

<210> 2135
 <211> 439
 <212> DNA
 <213> Homo sapiens

<400> 2135
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 actccgagcg tcgaccaaact cgagatgcat cctcgttca accaggcgac cttccgcgca
 120
 gagctggccg agcgcggcat taacccggag gcctggagcc cgctgggcca gtcgaaggac
 180
 ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccagggtg
 240
 gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
 300
 cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
 360
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 420
 ttctgcaaca ataaccggt
 439

<210> 2136
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2136
 Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala
 1 5 10 15
 Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser
 20 25 30
 Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn
 35 40 45
 Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro
 50 55 60
 Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val
 65 70 75 80
 Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser
 85 90 95
 Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu
 100 105 110
 Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn
 115 120 125
 Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe
 130 135

<210> 2137
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2137
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 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
 120
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
 180
 tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggcctcgtac
 240
 ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag
 300
 atggggctga ggtcactgtg cgcccaagcc
 330

<210> 2138
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 2138
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80
 Ser Leu Cys Ala Gln Ala
 85

<210> 2139
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 2139
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 gtgaacaagc tggcgagtac catcgcccag tacaacgata agatttccaa agtcaccacc
 120
 gccgccggtg ccccgaacga cctgctggac cagcgcagcg aggcgggtgcg ccagttgtcc
 180
 gagctggctg ggaccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc
 240
 ggtcagcgcc tggatgatgg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc
 360
 acggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgaccg
 420
 tcgatcaacg cgt
 433

<210> 2140
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 2140
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp
 1 5 10 15
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn
 20 25 30
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
 35 40 45
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
 50 55 60
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
 65 70 75 80
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
 85 90 95
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
 100 105 110
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
 115 120 125
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
 130 135 140

<210> 2141
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 2141
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 gtttatacctt atctttcttt ccgcttgatc aatgatattg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgtea tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtggtgcgca attgtttgaa
 240
 gcggttggtc tggatactaa agtggtcgac ctttgtttca aaggcggtgc aagtcgtatc
 300
 aaagggtgctc gttttgaaga tttccagcgt gatcaagcaa cgattgccaa taatgcttgg
 360
 aagttacgta aacctattca acagggcggt tatcttaaata acgtacatga ctctgagtat
 420
 cacgcg
 426

<210> 2142
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2142
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
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 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20 25 30
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35 40 45
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50 55 60
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65 70 75 80
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85 90 95
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
 100 105 110
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
 115 120 125
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
 130 135 140

<210> 2143
 <211> 1008
 <212> DNA
 <213> Homo sapiens

<400> 2143
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 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
 120
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgctga taacctcggg
 180
 acggtcctca gcccctccaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
 240
 acgetcaaga gcacatatga gtacctccgg ctcacgacg gtcacgatct acccgacgac
 300
 gatggctacg ctcatgatca tctggtcgcg gctttgcgcc cgtatttggt gaatggtgga
 360
 gacagtccgc agggccacgt caccacaactc atggcggcgt catccctgaa aacctcaac
 420
 gcgttgctcg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggctgc
 480
 atcacgagaa agacggtgat gacggatctg cccatcgca cgatgaggcg ggagatcggc
 540
 ctgtccaacg acgggttggt cctcacaccg tggaagggtca agacgacttc ttccgaggag
 600
 gtcgggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
 660

gagaaatggg ggtgggagtc gatctcggac gggatatttgc gccatctcga gacctacagt
 720
 ggcccgagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct
 780
 cgttcccagt tgcaacgcat cggcgacagt ctcgcggatg cgccatatcc gaggaaggac
 840
 cttggtccgg cgctcattcg caatggaaag cgggtcaagg acaagtgcag tatcgaatcg
 900
 gcgtacctgt tgaggtattc cgggaattgg gcgtggtgac atgacggttt cttggcaagg
 960
 tgtgaccaag acattcccct cgggcgattc cgcgcgtggg ggggtgcac
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
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His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
	50					55					60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75					80
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90					95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115					120					125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130				135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155					160
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165				170						175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195					200					205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
		210				215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230					235					240
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
				245				250						255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
			260					265					270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

<400> 2147

ctccctgcgg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatgggtggg
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 120
 acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg
 180
 gcggaggcca cgttccgcga gggTcccccc gccgcgttca gcgggcacaa cgcgt
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
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Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
			20					25					30		
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40					45			
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50					55					60				
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70					75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

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 120
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc
 180
 ctggcttggt gtgctgtgtc cagcaaacta caggggtgcc gctggtagtt atgggtgaaac
 240
 cagacacttt tcttatccac gagattaaga ctcttcctgc taaagcgaag atccaagaca
 300
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt
 360
 gtgaggatgg cagcctgcgc atttacctgg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa
 480
 cagctacaat cacaaccng cagctctagc caggtgactt tccccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat
 600
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 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg
 720
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga
 780
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tccccttcac cagagaagaa
 840
 gccctgcagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcagg
 900
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
 960
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaactctg
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtggaaact
 1080
 gtcctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc
 1140
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg
 1200
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 1320
 agtgctgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt
 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa
 1440
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 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
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Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20					25					30			
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35				40					45				
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
	50				55			60							
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65				70				75					80		
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
			85				90						95		
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
		100				105						110			
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
	115				120			125							
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
130					135			140							
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

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145          150          155          160
Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
          165          170          175
Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
          180          185          190
Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
          195          200          205
Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
          210          215          220
Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
225          230          235          240
Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
          245          250          255
Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
          260          265          270
Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
          275          280          285
Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
          290          295          300
Gln Gln Ser Lys Val Glu Gly Gly
305          310

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<210> 2151

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2151

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120
gtgcatcagc gtccttttca gttgaccggg atcgccgatc cattgcgggc gctggctcgt
180
gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tggtcgtcaa tgacatcggt
240
gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtggtggtc
300
tgcacctcca atctgccgcc ggatcagctg tatgccgacg gcttcaaccg cgaccgcttc
360
ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcggaa
420
gatcatcgct tgcattcccg cgccatcgag cagcgttact gggtcgctct gccggagcag
480
ggtagcgcgt tgagccaggt gttcgacgcg t
511

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<210> 2152

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

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Met	Asp	Gln	Phe	His	Gln	Ser
		20			25	
His	Phe	His	His	Phe	Met	Gly
		35			40	
Thr	Gly	Ile	Ala	Asp	Pro	Leu
		50			55	
Glu	Val	Arg	Val	Leu	Cys	Phe
65				70		75
Asp	Ala	Ile	Ile	Leu	Gly	Arg
			85		90	
Val	Val	Val	Val	Cys	Thr	Ser
		100			105	
Asp	Gly	Phe	Asn	Arg	Asp	Arg
		115			120	
Gln	His	Met	Gln	Val	Val	Ala
		130			135	
His	Pro	Gly	Ala	Ile	Glu	Gln
145				150		155
Gly	Ser	Ala	Leu	Ser	Gln	Val
			165		170	

<210> 2153
 <211> 528
 <212> DNA
 <213> Homo sapiens

<400> 2153
 nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
 60
 tcagtacgtg cacggcgatt ggcggcggca attgggacca ctccgcgctg atcaagggcc
 120
 tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
 180
 tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagccccgtt
 240
 atgtcggctg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
 300
 caccgccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
 360
 attgggcccg gcaaaaccgc acccgccatg gccctcgtcg tcgagaacgg ctggcaaggc
 420
 gaagtcaccg gcctggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
 480
 gtggtcgagg ccgctcaccg ggtgccggat gccgccggcc tggcggtg
 528

<210> 2154
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2154
 Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala

```

      1             5             10             15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20             25             30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35             40             45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50             55             60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65             70             75             80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85             90             95

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<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

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gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccg actgcgaggt gctcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcggaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg
240
cgcggcctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

```

<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

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Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
      1             5             10             15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20             25             30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35             40             45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50             55             60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65             70             75             80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85             90

```

<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aagggtgagcc actttcggcc
 60
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataaccgtt
 120
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggcaacg ctttggtcca cgtttccggc
 240
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgaggtgcg tcatcttgtc gctaatagccg atctggccaa agcaaccggt
 360
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
 420
 gtaccgcgag ttgttggcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
 ggggagctta ccgaggacac gctcactgat cgccgtatcc tcggtgagga gggattcttg
 540
 tcagtcgtca ccgtggtcga caccgcctcg gcgtcagtgg tgtctcgccc ggcgatccag
 600
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc
 660
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1				5					10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35				40						45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55					60				
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85					90						95	
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
	130					135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145				150					155					160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165					170					175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

			180					185					190				
Val	Val	Ser	Arg	Pro	Ala	Ile	Gln	Ala	Arg	Gly	Phe	Ala	Glu	Gly	Asp		
		195					200					205					
Ser	Val	Phe	Ala	Glu	Ile	Thr	Asp	Gln	Ile	Val	Thr	Glu	Leu	Glu	Lys		
	210					215					220						
Ala	Met	Ala	Gly	Gly	Met	Asp	Asp	Thr	His	Arg	Leu	Gln					
225					230					235							

<210> 2159

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2159

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tcgcgagcac actccagcct ctggagagac gacaacgcgt gaagggggcac cagcttgagg
60
ggcagcagct ccagggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgttttga aaagtgtgtc ctgcagatgg tgggtgagag ttcgctgcca gggccactgt
180
cttccttgcc ctgcggacac ttcttcccca ccttcctaaa gctgtggggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca
300
tgggggcctt ctggttctcc tt
322

```

<210> 2160

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2160

Met	Val	Ala	Pro	Gly	Cys	Asp	Phe	Leu	Arg	Phe	Leu	Ser	Gln	Arg	Ala		
1				5				10					15				
Ile	Asp	Ala	Pro	Arg	Leu	Gln	Val	Ser	His	Ser	Phe	Arg	Lys	Val	Gly		
		20					25					30					
Lys	Lys	Cys	Pro	Gln	Gly	Arg	Glu	Asp	Ser	Gly	Pro	Gly	Ser	Glu	Leu		
	35				40						45						
Ser	Pro	Thr	Ile	Cys	Arg	Asp	Asn	Phe	Ser	Lys	Gln	Val	Glu	Gly	Asn		
	50				55					60							
Arg	Leu	Leu	Leu	His	Lys	Ala	Leu	Pro	Gly	Arg	Pro	Trp	Ser	Cys	Cys		
65				70				75						80			
Pro	Ala	Ser	Trp	Cys	Pro	Phe	Thr	Arg	Cys	Arg	Leu	Ser	Arg	Gly	Trp		
			85					90						95			
Ser	Val	Leu	Ala														
			100														

<210> 2161

<211> 1070

<212> DNA

<213> Homo sapiens

<400> 2161

tcttagggga aggggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca
 60
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaagggtta
 120
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
 180
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag
 480
 ccagggcata aggttttgct gtccaggaag ctttgttga aaaatgttag aagtaatggg
 540
 tttggtcagt atggtgagag gtgagagagg ctaaattggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga
 840
 agaaagtgaa gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaaggac catcgtataa aacagacaaa agttaagact agatggagtg
 1020
 gcaactaggc agatcagatg tatttttaaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5				10						15	
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
		20						25					30		
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
		35				40					45				
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
	50				55					60					
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65				70				75						80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser

```

      85              90              95
Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
      100              105              110
Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
      115              120              125
Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
      130              135              140
Tyr
145

```

<210> 2163
 <211> 657
 <212> DNA
 <213> Homo sapiens

```

<400> 2163
tattttaaattc ttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
60
ggcctccctc caatccacct ccacttccta caccaccccc gctctcccc ccccccttt
120
tggttccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
180
agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacggggcg
240
ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc
300
agacatgcca agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgctc
360
ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
420
cagacaggag tccgtcccg tccagtcctat catccaaga aacatccggc ccgactccct
480
gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctggctgctt tccatccaac
540
tttgatccct tccccaaagag gaagagtgtc acctagggac aagtgtggtg cgcacaggca
600
tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
657

```

<210> 2164
 <211> 152
 <212> PRT
 <213> Homo sapiens

```

<400> 2164
Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
1      5      10      15
Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
20     25     30
Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
35     40     45
Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
50     55     60
Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

```

65		70		75		80									
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
				85				90						95	
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
			100					105					110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
		115					120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
	130					135					140				
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145						150									

<210> 2165

<211> 962

<212> DNA

<213> Homo sapiens

<400> 2165

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ncttttctcat cgacagcgcac gcacaaccgg cgacatcacc ggtgacgggt caaggtggca
60
gcccgaggggc ccgccgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaadc accccagcgc ctcaccccc gaactctgtc gccatctgct gtcgccccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgagggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcttggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta cteccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtgctg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgccgagg ttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa
780
tccctcgtcg ttgatgccgt cgtgcgagcc gacgccgatg aacagctcat ctgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacgggtgcta
960
gc
962

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<210> 2166

<211> 239
 <212> PRT
 <213> Homo sapiens

<400> 2166
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1 5 10 15
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
 20 25 30
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
 35 40 45
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50 55 60
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 65 70 75 80
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Ala Glu Pro Tyr
 85 90 95
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
 100 105 110
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
 115 120 125
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
 130 135 140
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
 145 150 155 160
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
 165 170 175
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
 180 185 190
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
 195 200 205
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
 210 215 220
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
 225 230 235

<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 2167
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
 60
 catccacatt atccccgactg gaagatctcg ccagggttacg gacagtggtc gcgtagcgaa
 120
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
 180
 attcttcgag cgggtgtctga ggtgacgttc ggggttcgctc tctgcgccgt ccgttggcga
 240
 agcaccgcgg cgattgtggc tgtgtcgcgc gccttgcctc cgacgcggtc gcgcgggtcg
 300
 tgcgctgac tcccacagca taccc
 325

<210> 2168
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2168
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1 5 10 15
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
 20 25 30
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35 40 45
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50 55 60
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65 70 75 80
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
 85 90 95
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
 100 105

<210> 2169
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 2169
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg
 60
 atcctggaga aggtcgtaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac
 120
 ggggaggccc tgtccaccct cgtcgtaaat aagatccgcg gtaccttcag ctcggtggca
 180
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc
 240
 accggtggtc aggtcgtcgc tcccagaggtt gggctcaagc tcgaccaggt gggcctcgag
 300
 gttcagggc
 309

<210> 2170
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2170
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1 5 10 15
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
 20 25 30
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35 40 45
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro

50		55		60											
Gly	Phe	Gly	Asp	Arg	Arg	Lys	Ala	Met	Leu	Gln	Asp	Ile	Ala	Thr	Leu
65					70					75					80
Thr	Gly	Gly	Gln	Val	Val	Ala	Pro	Glu	Val	Gly	Leu	Lys	Leu	Asp	Gln
				85					90					95	
Val	Gly	Leu	Glu	Val	Gln	Gly									
				100											

<210> 2171

<211> 518

<212> DNA

<213> Homo sapiens

<400> 2171

cgcgtaatgt gtattaaggt ccttggtggc tcgcatcgcc gttatgcagc aatcgggtgat
 60
 atcatcaaag tttcagtgaa ggaagcaatt cctcgcggaa aaattaaaaa aggtaatgtt
 120
 cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
 180
 cgttttgatc gcaacgcagc gggtatcttg aatgcaaaca accagccagt cggtacacgt
 240
 atctttggcc ctgtaacccg tgagcttcga aatgaaaatt tcatgaagat tgtttctactg
 300
 gcgccagaag tactgtaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
 360
 aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
 420
 cggtaaagta attattgaag gtgtaaattg tcaaaagaaa caccaaaaac caaacctca
 480
 agcgggcgtg gaaggcggaa tcattgaaca gaatgcat
 518

<210> 2172

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2172

Arg	Val	Met	Cys	Ile	Lys	Val	Leu	Gly	Gly	Ser	His	Arg	Arg	Tyr	Ala
1				5				10						15	
Ala	Ile	Gly	Asp	Ile	Ile	Lys	Val	Ser	Val	Lys	Glu	Ala	Ile	Pro	Arg
			20					25					30		
Gly	Lys	Ile	Lys	Lys	Gly	Asn	Val	His	Ser	Ala	Val	Val	Val	Arg	Thr
		35				40						45			
Arg	Lys	Gly	Val	Arg	Arg	Pro	Asp	Gly	Ser	Val	Ile	Arg	Phe	Asp	Arg
	50				55					60					
Asn	Ala	Ala	Val	Ile	Leu	Asn	Ala	Asn	Asn	Gln	Pro	Val	Gly	Thr	Arg
65				70					75					80	
Ile	Phe	Gly	Pro	Val	Thr	Arg	Glu	Leu	Arg	Asn	Glu	Asn	Phe	Met	Lys
				85				90						95	
Ile	Val	Ser	Leu	Ala	Pro	Glu	Val	Leu							
			100					105							

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2173
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
 60
 cgggcgcggtg ccttttgcgg cgggggtttcg agcattcatc tggatgcacg attttcgcat
 120
 gcatttcttg tctctctgct atgcgtttct ccccatgcac acacattatc gcctttgcac
 180
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa
 300
 agagagatgg agctctatgg ccccaaaaag cgtggaccca agcccaaaac ctctctctc
 360
 aaagcgagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
 420
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175

cgcgacaccc tctttggtgg gcgccttcct tctccgaatt cgcgaaacct ccagactctg
60
gcccaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac
120
cgccctcggtg tcattgatga ccagggggcat ttcttgcatc ccaaccagat cctcgtattg
180
ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
240
acgaccaccc tgcttgaccg tgtcgccgag gcccacgggc agacctgtta cgaggtaccg
300
gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cgggtggtgag
360
tcctccggtg gtttgaccgt ccagggggcat attgcaggca aggatggtgt ctatgctggc
420
accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt
462

<210> 2176

<211> 154

<212> PRT

<213> Homo sapiens

<400> 2176

Arg	Asp	Thr	Leu	Phe	Gly	Gly	Arg	Leu	Pro	Ser	Pro	Asn	Ser	Arg	Thr
1				5					10					15	
Leu	Gln	Thr	Leu	Ala	Gln	Glu	Val	Val	Glu	Arg	Gly	Ala	Asp	Ile	Gly
			20					25					30		
Ile	Ala	Thr	Asp	Gly	Asp	Ala	Asp	Arg	Leu	Gly	Ile	Ile	Asp	Asp	Gln
		35					40					45			
Gly	His	Phe	Leu	His	Pro	Asn	Gln	Ile	Leu	Val	Leu	Leu	Tyr	Thr	Tyr
	50					55					60				
Leu	Leu	Glu	Asp	Lys	Gly	Trp	Gln	Val	Pro	Cys	Val	Arg	Asn	Leu	Ala
65					70					75				80	
Thr	Thr	His	Leu	Leu	Asp	Arg	Val	Ala	Glu	Ala	His	Gly	Gln	Thr	Cys
			85					90						95	
Tyr	Glu	Val	Pro	Val	Gly	Phe	Lys	Trp	Val	Ser	Ser	Lys	Met	Ala	Glu
			100					105					110		
Thr	Asn	Ala	Val	Ile	Gly	Gly	Glu	Ser	Ser	Gly	Gly	Leu	Thr	Val	Gln
		115					120					125			
Gly	His	Ile	Ala	Gly	Lys	Asp	Gly	Val	Tyr	Ala	Gly	Thr	Leu	Leu	Val
	130					135					140				
Glu	Met	Ile	Ala	Lys	Arg	Gly	Lys	Lys	Leu						
145						150									

<210> 2177

<211> 478

<212> DNA

<213> Homo sapiens

<400> 2177

ctcgaagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
60

accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac
 120
 gacttttttg gtgtgaggtt tgcggccct ggggcagatg atcgtgccct ccttgtccac
 180
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
 240
 tggccgggtg cggtgacca ggctggctcg aagtccgca gtcgacgtct gccggtcggc
 300
 gttcctgacc ctgagacgtg gcggcgctatc aaagacggcg aggatattcc ggatgccgag
 360
 gtcacgcggg ccatgtcttg ccggcgcccc cgatcagctg cccgtcgaat ggcaagcacg
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5					10					15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
			20					25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35				40					45				
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
	50				55					60					
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
65				70					75					80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
			85					90					95		
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115				120					125				
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
	130					135					140				
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gagtggacgt cgagcgtcgc attaacgggg ccggcgcggt gggcgcacac
 60
 aagacgtcga tgctgcagga tctggacngc gaccgcgcga tggagatcga cccgctcgtc
 120
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cgcccacgct cgatgtcgtg
 180

ctccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
 240
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcgggn
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgcgccgg gatggatcat agtctggctc gatgcatcac gtgcgcgcgc ggcgcgcgctg
 60
 tcgattcccg acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc
 120
 acgctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg
 180
 gtcgcgcgccgg ggcagacgct cgcgaagatt tcgggcctct cgaagctctg gctgatcgtc
 240
 gagattcccg aagcgctcgc gctcgatgcg cgcccgggca tgaccgtcga cgcgacgttc
 300
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgag agatcctgcc gggcatcacc
 360
 accagtagcc gcacgcttca ggcgcgc
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

```

      20      25      30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35      40      45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50      55      60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
65      70      75      80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85      90      95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100      105      110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
      115      120      125
Arg

```

<210> 2183
 <211> 310
 <212> DNA
 <213> Homo sapiens

```

<400> 2183
aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcaggga ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaatgtgga aacttttggg tcaagagggt attctaggag atacaagaaa tatctcctgg
180
gggcatccaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccaggga
240
atagggatga aaaccataaa ctcctttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

```

<210> 2184
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2184
Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1      5      10      15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
      20      25      30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
      35      40      45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
      50      55      60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65      70      75      80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
      85      90      95
Val Phe Gln Ala

```

100

<210> 2185
 <211> 723
 <212> DNA
 <213> Homo sapiens

<400> 2185
 ngaatatcca tgcagcagct cgtcgacaat tttgacggtg ccatccctga cgatcttgac
 60
 tctcttgtga ccctgcccgg agtcggtcgt aagaccgcca atgttgtttt aggtaatgcc
 120
 ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
 180
 tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgg
 240
 tctgaatggg tgatgttgtg tcaccgctc atctggcacg ggcggcgggc ctgtcactcg
 300
 cggcgtcctg cctgcggggt atgcccggtt gccgagtggt gcccgtcctt cggggaaggc
 360
 ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga
 420
 acgttttcgg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca
 480
 tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga
 540
 ttgcgaaaag ttccgggccc gccacagagg gccggcccat gcccgatcac ggcttgcaat
 600
 gccttggtga ggggccgacg atctccatgt ctcgggacgac atcgaggggc gtgaccgtcg
 660
 tgacgatctg ggcgtcgtgg tgtcgacat gtcgtagtga ggctccgctc attgcgaacg
 720
 cgt
 723

<210> 2186
 <211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2186
 Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
 1 5 10 15
 Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
 20 25 30
 Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
 35 40 45
 Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
 50 55 60
 Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
 65 70 75 80
 Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
 85 90 95
 Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```

          100          105          110
Trp Cys Pro Ser Phe Gly Glu Gly Pro Thr Asp Pro Glu Glu Ala Ala
          115          120          125
Thr Leu Val Arg Glu Pro Arg Arg
          130          135

```

<210> 2187
 <211> 342
 <212> DNA
 <213> Homo sapiens

```

<400> 2187
nnacgcgtga aggatgcgcc cgggtcgacc ggccatccgt cttgcctcgc aggcattccag
60
cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
120
cgcattgatc cagcaggggt atcggcgcga aagaagttgc cggggcaaaa tcccggcgag
180
gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc
240
ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
300
gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
342

```

<210> 2188
 <211> 51
 <212> PRT
 <213> Homo sapiens

```

<400> 2188
Met Glu Trp Lys Thr Leu Leu Asn Asp Thr Arg Phe Gly Gly Val Ala
  1          5          10          15
Ser Leu Asp Gly Thr Arg Gly Arg Ser Glu Phe Gln Lys Asp His Asp
          20          25          30
Arg Ile Ile Phe Ser Glu Ala Phe Arg Lys Leu Gly Arg Lys Thr Gln
          35          40          45
Val His Pro
          50

```

<210> 2189
 <211> 1412
 <212> DNA
 <213> Homo sapiens

```

<400> 2189
ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
60
cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct
120
ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga
180
gggctgcccc ggcggtgcc caggtgatca gtgcctgaca ccgggctgac ttcgcaggtc
240

```

atcgaggcaa tctgtgcctg gttcgacgcc aacggacgcg atctgccgtg gcgccgaccc
 300
 ggcacctccg cgtggggcgt gcttgtttagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttaccg gcgtcggggc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac
 540
 agtgacgacg agctcgtcgc cctcccgggt attggcgact acaccgcgag cgagtcgtc
 600
 tcttttgctg ttggcgggcg cgccacagtg cttgacacca atgtacgtcg cctcatcgt
 660
 agagcagagt ctgggatcgc aaactgtcca acctcggtga cgagggctga gcgggtagtc
 720
 gccgacgcgt tggttcccg cgaagacgtc cgagcggcca agtgggcgggt ggcgtcgtg
 780
 gaattggggg cactggtatg cacggcgcg tctccgcagt gtgaggtctg cccgatccgg
 840
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgggccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtgccgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaagggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggg ttagtgacc gacgaggtaa ccttattagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgccc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact
 1320
 gttcgggtgc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttccgggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
		20					25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
	35					40					45				
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50	55	60
Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala		
65	70	75
Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser		80
	85	90
Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser		95
	100	105
Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser		110
	115	120
Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr		125
	130	135
Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys		140
145	150	155
Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val		160
	165	170
Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu		175
	180	185
Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys		190
	195	200
Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn		205
	210	215
Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys		220
225	230	235
Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys		240
	245	250
Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg		255
	260	265
Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn		270
	275	280
Leu Ile Ser Leu		285
290		

<210> 2191
 <211> 502
 <212> DNA
 <213> Homo sapiens

<400> 2191
 nnacgcgtcg agaattctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat
 60
 gactcccttg acgacgacac catttcgagg ggtagcccac attggtgctg cctcatggac
 120
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
 180
 agagtattgc tgaattctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
 240
 cgcgaggagg cctcagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
 300
 gccgccggaa aagtgcgtcg ccactttttc gataaccggg ttcgcctcaa ctacctgggc
 360
 aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
 420
 cgtgccgaga tcacgaaata ctctggggc gatccgcaga aggtacacga cgccgtcgag
 480

gctgggattg ccggtggtgc ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aaccctgctg tgtgcccaga
240
cagaggtccc actgccctgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

```

      35              40              45
Lys Asn Phe Lys Ser Pro Phe Ile Ser Leu His Lys Ser Cys Thr Ala
  50              55              60
Asn Arg Asp Thr Leu Phe Ser Leu Glu Thr Leu Leu Cys Ala Gln Thr
  65              70              75              80
Glu Val Pro Leu Pro Trp Asp Ser Ser Leu Ala Xaa Arg Gly Arg Arg
      85              90              95
Val Cys Val Leu Cys Val Phe Arg Leu Gly
      100              105

```

<210> 2195
 <211> 504
 <212> DNA
 <213> Homo sapiens

```

<400> 2195
naccggtctc cctacatcaa tgcccaccgc gattgcacct ttgttgatcat gtcacctggc
  60
gacggtgtgg cacaccccaa ctttggaat atcgccacg acctggtgct gttgcacagc
 120
ctgggtgtgc gtctggtact ggtccacggt tcgcgccgc agatcgacag ccgccttgag
 180
gcacgaggcc tgggtgccga ttaccacaag ggcattgctg tcaccgatgc atcaacgctc
 240
gaatgcgtga tcgatgctgt cgggcaactg cgcattgcca ttgaagcgcg cttgtcgatg
 300
gacatggcgt cttcgccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
 360
actgcgcggc cgatcggcgt gtcgacggt gtggattttc accataccgg cgaagtgcgc
 420
cgggtggacc gcaagggcat caaccgctg ctgatgagc gtcgattgt gctgctgtcg
 480
cccttgggtt actcgccac cggt
 504

```

<210> 2196
 <211> 168
 <212> PRT
 <213> Homo sapiens

```

<400> 2196
Xaa Ala Ser Pro Tyr Ile Asn Ala His Arg Asp Cys Thr Phe Val Val
  1              5              10              15
Met Leu Pro Gly Asp Gly Val Ala His Pro Asn Phe Gly Asn Ile Val
      20              25              30
His Asp Leu Val Leu Leu His Ser Leu Gly Val Arg Leu Val Leu Val
      35              40              45
His Gly Ser Arg Pro Gln Ile Asp Ser Arg Leu Glu Ala Arg Gly Leu
      50              55              60
Val Pro Tyr Tyr His Lys Gly Met Arg Val Thr Asp Ala Ser Thr Leu
  65              70              75              80
Glu Cys Val Ile Asp Ala Val Gly Gln Leu Arg Ile Ala Ile Glu Ala
      85              90              95
Arg Leu Ser Met Asp Met Ala Ser Ser Pro Met Gln Gly Ser Arg Leu

```

```

                100                105                110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
                115                120                125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
                130                135                140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145                150                155                160
Pro Leu Gly Tyr Ser Pro Thr Gly
                165

```

<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

```

acaagtccgt cgacgattcg ctttcgggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgctgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggetgg tgcagtgttt agtcaaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
 1                5                10                15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
                20                25                30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
                35                40                45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
                50                55                60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65                70                75                80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
                85                90                95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
                100                105                110
Gly Ile Asp Gln Arg
                115

```

<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa
 120
 ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgcct gcctgcctgc
 180
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct gcgacgcaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
 300
 ggcggcccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggtaagtcc cgccggc
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
		35				40					45				
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
	50					55				60					
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70				75					80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85					90					95		
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100				105						110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Leu	Met	Ser	Leu	Leu	His	Leu	
	115					120				125					
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
	130					135					140				
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145					150										

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgtcgtggat ggtggtcgca aattacatgt ttgtggtaac
 60
 aaccctgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcgtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gatttcttcg tcttacgtga gggcgctgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1				5					10					15	
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
			20					25					30		
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50				55					60					
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70				75					80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
				85				90						95	
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105						110	

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcaccag ccgggggtggg aagctgtgca gacagccccg gatctgggac
 60
 gtgatggaaa actcaacaga ctgggttcaga tcttggccccg gagcccagag gcaccggggg
 120
 cccccagggc tgtttctccc tggccacacc agtaccaccac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgtcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1             5             10             15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
          20             25             30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
          35             40             45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
          50             55             60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
65             70             75             80
Ala Ser Leu Arg Cys Pro Asp Gly
          85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

```

gnnnnnggng nnnnactggg gtgcatgggt aaaatcctgc aagctactgg gttgccacag
60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
120
gtcgctcctg aagtggacac ctctctctct tccgtcagca aggagccgca ctgcatgggt
180
gtctttgatc attgcaatga gttttctggt aacatcacccg aagactttat cgagcatctt
240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
300
cccgccctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
360
agtgaagtgc ccaggaaatt ggaattc
387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1             5             10             15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
          20             25             30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
          35             40             45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
          50             55             60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
65             70             75             80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```

```
<210> 2207
<211> 667
<212> DNA
<213> Homo sapiens
```

```

<400> 2207
atctccaacc ccgagaccct ctccaatata gccggcttcg agggctacat cgacctgggg
60
cgcgagctct ccagcctgca ctactgctc tgggaggccg tcagccagct ggagcagagc
120
atagtatcca aactgggacc cctgcctcgg atcctgaggg acgtccacac agcactgagc
180
accccgagta gcgggcagct cccagggacc aatgacctgg cctccacacc gggctctggc
240
agcagcagca tctcagctgg gctgcagaag atggtgattg agaacgatct ttccggctctg
300
atagatttca cccggttacc gtctccaacc cccgaaaaca aggacttggt ttttgtcaca
360
aggtcctccg gggctccagcc ctacactgcc cgcagctcga gttactcgga agccaacgag
420
cctgatcttc agatggccaa cggtggcaag agcctctcca tgggtggacct ccaggacgcc
480
cgcacgctgg atggggaggc aggctccccg gcgggccccg acgtcctccc cacagatggg
540
caggccgctg cagctcagct ggtggccggg tggccggccc gggcaacccc agtgaacctg
600
gcagggctgg ccacggtgcg gcgggcaggc cagacaccaa ccacaccagg cacctccgag
660
ggcgcg
667

```

```
<210> 2208
<211> 222
<212> PRT
<213> Homo sapiens
```

```

<400> 2208
Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
 1              5              10              15
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
              20              25              30
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
              35              40              45
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
              50              55              60
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

```

65          70          75          80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
          85          90          95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
          100          105          110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
          115          120          125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
          130          135          140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
          145          150          155          160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
          165          170          175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
          180          185          190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
          195          200          205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
          210          215          220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

```

ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaagggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggccccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1          5          10          15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
          20          25          30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
          35          40          45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
          50          55          60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```



```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

<210> 2213
<211> 327

<212> DNA

<213> Homo sapiens

<400> 2213

```

acgcgtccga cgggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
60
gccggtgctt cgacacactg gggtatatcg cctcaaagc acaggtctac gaaggttctg
120
acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgcgtg
180
tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
240
atcgcccggg tggtcgacgc gatcacgtca cgggacgagg aagccgccca gcgtgcactg
300
ctcgaccaca atcgacgcgc gttggaa
327

```

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

```

Met Arg Ser Pro Ser Ile Ala Gly Ala Ser Thr His Trp Val Ile Ser
1           5           10           15
Pro Ser Lys His Arg Ser Thr Lys Val Leu Thr Glu Gly Pro Ala Asn
20           25           30
Pro Ile Ala Ala Ser Ala Leu Arg Ile Ile Arg Ala Arg Val Ser Gln
35           40           45
Leu Trp Gly Thr Ser Leu Leu Arg Asn Gly Arg Ala Glu Gln Ser Val
50           55           60
Val Glu Ile Ala Arg Leu Val Asp Ala Ile Thr Ser Arg Asp Glu Glu
65           70           75           80
Ala Ala Gln Arg Ala Leu Leu Asp His Asn Arg Ser Ala Leu Glu
85           90           95

```

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

```

ctggggatca tgccctacat cactgcgctc atcatcctgc agctgctgac agtcgtgac
60
ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtag
120
accggttacc tcaactctcg gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc
180
acctccggcc gtctattcac cmntgcagct ntgccagtcg tctactccac ctcggtcttc
240
gaagtcgctc tcatgatcct gactatgacg gccgggtacga ccatcgatcat gtggatgggt
300
gagctcatca ccgaccgcgg tatcggcaac ggtatgtcga tcatgatttt cactcagatt
360

```

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccggtcag
420

gctcacgcgt
430

<210> 2216
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2216
Leu Gly Ile Met Pro Tyr Ile Thr Ala Ser Ile Ile Leu Gln Leu Leu
1 5 10 15
Thr Val Val Ile Pro Lys Leu Glu Thr Leu Lys Lys Glu Gly Ala Ser
20 25 30
Gly Gln Asn Lys Ile Thr Gln Tyr Thr Arg Tyr Leu Thr Leu Val Leu
35 40 45
Gly Leu Leu Gln Ala Thr Ala Phe Val Thr Leu Ala Thr Ser Gly Arg
50 55 60
Leu Phe Thr Xaa Ala Ala Xaa Pro Val Val Tyr Ser Thr Ser Val Phe
65 70 75 80
Glu Val Val Val Met Ile Leu Thr Met Thr Ala Gly Thr Thr Ile Val
85 90 95
Met Trp Met Gly Glu Leu Ile Thr Asp Arg Gly Ile Gly Asn Gly Met
100 105 110
Ser Ile Met Ile Phe Thr Gln Ile Ala Ala Arg Phe Pro Asp Ser Leu
115 120 125
Trp Ser Ile Lys Val Ala Arg Asn Gly Ala Gly Gln Ala His Ala
130 135 140

<210> 2217
<211> 444
<212> DNA
<213> Homo sapiens

<400> 2217
accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcggggt
60
atgacgtggc tcgatgacga cgtgggcgcc gacctgttga atcaggctga ttccatggac
120
catgccctgg aggccaccgt cccaggctcg gtcaccacgc cggacgcca agtcatccag
180
acctgtgccg tggtgcgtga ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
240
gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcggggag
300
gttttcgaga ccgccgaacg catggtgggg ctggccgccg ccgacgtggt gtgggtctct
360
gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta
420
cgagagaatg tctttgctca gtcc
444

<210> 2218

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2218
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1 5 10 15
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Asp Val Gly Ala Asp Leu
 20 25 30
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
 35 40 45
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
 50 55 60
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
 65 70 75 80
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
 85 90 95
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
 100 105 110
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
 115 120 125
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
 130 135 140
 Phe Ala Gln Ser
 145

<210> 2219
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2219
 acgcgtaccg tcgttggcat gagcgtcctg ccactggaaa ttgggtgtc attcagctac
 60
 ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccggaaa ccgttggggag
 120
 tggtcgatcc ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
 180
 ggaatgttcc atagtgtgca gattgcgcgt catgtcagca gttaccacgg catcatggtc
 240
 gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgta ccctgatgag
 300
 cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca
 360
 gtgctgatga tctcgggtat caggccggtg acatggcgcc cgcttggtat cgattctctc
 420
 atcgagacga atctcggcgc tccgttcattg ttgctcattg tgaaagcttg gcgcgcgcc
 480
 cccgaaggaa ttcctggctc taccagtcgc cgcccgaccg cccgtggcac agcgcgagtc
 540
 tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga
 600
 gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtcctctctc tgcgtgacgc
 660

agagccgtgt gatgaggcga agtcatga
688

<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens

<400> 2220
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
1 5 10 15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
20 25 30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
35 40 45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
50 55 60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65 70 75 80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
85 90 95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100 105 110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115 120 125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130 135 140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145 150 155 160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165 170 175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180 185

<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2221
actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc
60
aaagaagagc aaaccgccat cgctaacgtc ctttccgaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aaccaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgagggttggg atgagccaca aggtgaattt agtgcacgag ctggataagc
240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atggtcacaa gagaacctaa atgcgctgat gagtgattta cgaatttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tggtttttca ttatcataat gaaccgtag
420

acaacgagaa tacccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgtctgc gttaacgcgt
 530

<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu
 1 5 10 15
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
 20 25 30
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
 50 55 60
 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
 cgcccgccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg
 60
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga
 120
 tgcatttacc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg
 180
 cgcgtcctgc gctgatatag gcctggagat gccccatggc gtgtcgggca acctcgtagt
 240
 tcaggccgtc gagcaccaca aggatgacgt tgtgcttcat aaggggagac gctccgcaac
 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggcgc gggcaagccc
 360
 gctcccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat
 420
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttccacgc
 480
 gt
 482

<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

1	5	10	15
Val Ile Leu Val Val Leu Asp Gly Leu Asn Tyr Glu Val Ala Arg His			
	20	25	30
Ala Met Gly His Leu Gln Ala Tyr Ile Ser Ala Gly Arg Ala Ala Leu			
	35	40	45
Tyr Lys Leu Asp Cys Glu Leu Pro Ala Leu Ser Arg Pro Leu Asp Lys			
	50	55	60
Cys Ile Phe Thr Gly Val Pro Pro Ile Asp Ser Gly Ile Val His Asn			
65	70	75	80
Asn Val Ser Arg Leu Ser Asn Gln Arg Ser Ile Phe His Tyr Ala Thr			
	85	90	95
Asp Ala Gly Leu Thr Thr Ala Ala Ala			
	100	105	

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

nacgcgtctg atccacacgg gccactgacg tggcggttatg acagggagcg ggccggtgcc
 60
 ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg
 120
 cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
 180
 aaggagggca tcggccacac aggttgggtc gtctcggacg agctcgggcc ggtgggcaac
 240
 gaggattatt gcgctgtcat cgcccgtatg gaaaacggag tgatgtgcac cctggagtcc
 300
 agtcgggtca gtgttgggcc gcgcgcggag tacatcgtcg agatctatgg aaccgacgga
 360
 tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat
 420
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<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

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Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val
      35           40           45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile
      50           55           60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn
      65           70           75           80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys
      85           90           95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile
      100          105          110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp
      115          120          125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln
      130          135          140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg
      145          150          155          160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val
      165          170          175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr
      180          185          190
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Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala
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<210> 2227
 <211> 324
 <212> DNA
 <213> Homo sapiens

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240
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<210> 2228
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 <213> Homo sapiens

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<400> 2228
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      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

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<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

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180
tgggccctgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
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320

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<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

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Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
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<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

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120
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180
catttactgt cggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcatttgtg ggatacccac cacgtgccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gactgtgaa gccagtgttg ttttacagat gaggaaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcaggtca tgtcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtcce ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcaggg ctgggggtgt tccccatcgg tgatagcctg gtgcccccat
540
ggcccctgat gccacggct gtctggaagg ctgggtcact gctgagaaga caaggagaca
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671

```

<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

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Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1      5      10      15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20     25     30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35     40     45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50     55     60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65     70     75     80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85     90     95
Val Ile Cys His Arg Tyr Met His Arg Thr Met Gln Thr Ser Gln Ser
100    105    110
Pro Leu Ser Gln Thr Arg Leu Thr Ile Arg Asp Met Gln Thr Leu Ala
115    120    125
Gly Leu Gly Leu Phe Pro Ile Gly Asp Ser Leu Val Pro Pro Trp Pro
130    135    140
Leu Met Pro Thr Ala Val Trp Lys Ala Gly Ser Leu Leu Arg Arg Gln

```

145		150		155		160									
Gly	Asp	Ile	Phe	Ser	His	Gln	Leu	Ser	Phe	Phe	Tyr	Ser	Phe	Leu	Asp
				165				170						175	
Thr															

<210> 2233

<211> 6199

<212> DNA

<213> Homo sapiens

<400> 2233

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<211> 1701

<212> PRT

<213> Homo sapiens

<400> 2234

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			20					25					30		
Pro	Lys	Tyr	Ala	Gln	Ala	Gly	Phe	Glu	Gly	Phe	Lys	Thr	Leu	Asn	Arg
		35					40					45			
Ile	Gln	Ser	Lys	Leu	Tyr	Arg	Ala	Ala	Leu	Glu	Thr	Asp	Glu	Asn	Leu
	50					55					60				
Leu	Leu	Cys	Ala	Pro	Thr	Gly	Ala	Gly	Lys	Thr	Asn	Val	Ala	Leu	Met
65					70					75				80	
Cys	Met	Leu	Arg	Glu	Ile	Gly	Lys	His	Ile	Asn	Met	Asp	Gly	Thr	Ile
				85					90					95	
Asn	Val	Asp	Asp	Phe	Lys	Ile	Ile	Tyr	Ile	Ala	Pro	Met	Arg	Ser	Leu
		100						105					110		
Val	Gln	Glu	Met	Val	Gly	Ser	Phe	Gly	Lys	Arg	Leu	Ala	Thr	Tyr	Gly
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Ile	Thr	Val	Ala	Glu	Leu	Thr	Gly	Asp	His	Gln	Leu	Cys	Lys	Glu	Glu
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Ile	Ser	Ala	Thr	Gln	Ile	Ile	Val	Cys	Thr	Pro	Glu	Lys	Trp	Asp	Ile
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			165					170						175	
Ile	Val	Leu	Asp	Glu	Ile	His	Leu	Leu	His	Asp	Asp	Arg	Gly	Pro	Val
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Phe	Val	His	Ser	Arg	Lys	Glu	Thr	Gly	Lys	Thr	Ala	Arg	Ala	Ile	Arg
	290					295					300				
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Ser	Ala	Ser	Thr	Glu	Val	Leu	Arg	Thr	Glu	Ala	Glu	Gln	Cys	Lys	Asn
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Leu	Glu	Leu	Lys	Asp	Leu	Leu	Pro	Tyr	Gly	Phe	Ala	Ile	His	His	Ala

340 345 350
 Gly Met Thr Arg Val Asp Arg Thr Leu Val Glu Asp Leu Phe Ala Asp
 355 360 365
 Lys His Ile Gln Val Leu Val Ser Thr Ala Thr Leu Ala Trp Gly Val
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 Asn Leu Pro Ala His Thr Val Ile Ile Lys Gly Thr Gln Val Tyr Ser
 385 390 395 400
 Pro Glu Lys Gly Arg Trp Thr Glu Leu Gly Ala Leu Asp Ile Leu Gln
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 420 425 430
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 625 630 635 640
 Ala Leu Met Ala Asp Met Val Tyr Val Thr Gln Ser Ala Gly Arg Leu
 645 650 655
 Met Arg Ala Ile Phe Glu Ile Val Leu Asn Arg Gly Trp Ala Gln Leu
 660 665 670
 Thr Asp Lys Thr Leu Asn Leu Cys Lys Met Ile Asp Lys Arg Met Trp
 675 680 685
 Gln Ser Met Cys Pro Leu Arg Gln Phe Arg Lys Leu Pro Glu Glu Val
 690 695 700
 Val Lys Lys Ile Glu Lys Lys Asn Phe Pro Phe Glu Arg Leu Tyr Asp
 705 710 715 720
 Leu Asn His Asn Glu Ile Gly Glu Leu Ile Arg Met Pro Lys Met Gly
 725 730 735
 Lys Thr Ile His Lys Tyr Val His Leu Phe Pro Lys Leu Glu Leu Ser
 740 745 750
 Val His Leu Gln Pro Ile Thr Arg Ser Thr Leu Lys Val Glu Leu Thr
 755 760 765
 Ile Thr Pro Asp Phe Gln Trp Asp Glu Lys Val His Gly Ser Ser Glu

770	775	780
Ala Phe Trp Ile Leu Val Glu Asp Val Asp Ser Glu Val Ile Leu His		
785	790	795
His Glu Tyr Phe Leu Leu Lys Ala Lys Tyr Ala Gln Asp Glu His Leu		800
	805	810
Ile Thr Phe Phe Val Pro Val Phe Glu Pro Leu Pro Pro Gln Tyr Phe		815
	820	825
Ile Arg Val Val Ser Asp Arg Trp Leu Ser Cys Glu Thr Gln Leu Pro		830
	835	840
Val Ser Phe Arg His Leu Ile Leu Pro Glu Lys Tyr Pro Pro Pro Thr		845
	850	855
Glu Leu Leu Asp Leu Gln Pro Leu Pro Val Ser Ala Leu Arg Asn Ser		860
865	870	875
Ala Phe Glu Ser Leu Tyr Gln Asp Lys Phe Pro Phe Phe Asn Pro Ile		880
	885	890
Gln Thr Gln Val Phe Asn Thr Val Tyr Asn Ser Asp Asp Asn Val Phe		895
	900	905
Val Gly Ala Pro Thr Gly Ser Gly Lys Thr Ile Cys Ala Glu Phe Ala		910
	915	920
Ile Leu Arg Met Leu Leu Gln Ser Ser Glu Gly Arg Cys Val Tyr Ile		925
	930	935
Thr Pro Met Glu Ala Leu Ala Glu Gln Val Tyr Met Asp Trp Tyr Glu		940
945	950	955
Lys Phe Gln Asp Arg Leu Asn Lys Lys Val Val Leu Leu Thr Gly Glu		960
	965	970
Thr Ser Thr Asp Leu Lys Leu Leu Gly Lys Gly Asn Ile Ile Ile Ser		975
	980	985
Thr Pro Glu Lys Trp Asp Ile Leu Ser Arg Arg Trp Lys Gln Arg Lys		990
	995	1000
Asn Val Gln Asn Ile Asn Leu Phe Val Val Asp Glu Val His Leu Ile		1005
	1010	1015
Gly Gly Glu Asn Gly Pro Val Leu Glu Val Ile Cys Ser Arg Met Arg		1020
1025	1030	1035
Tyr Ile Ser Ser Gln Ile Glu Arg Pro Ile Arg Ile Val Ala Leu Ser		1040
	1045	1050
Ser Ser Leu Ser Asn Ala Lys Asp Val Ala His Trp Leu Gly Cys Ser		1055
	1060	1065
Ala Thr Ser Thr Phe Asn Phe His Pro Asn Val Arg Pro Val Pro Leu		1070
	1075	1080
Glu Leu His Ile Gln Gly Phe Asn Ile Ser His Thr Gln Thr Arg Leu		1085
	1090	1095
Leu Ser Met Ala Lys Pro Val Tyr His Ala Ile Thr Lys His Ser Pro		1100
1105	1110	1115
Lys Lys Pro Val Ile Val Phe Val Pro Ser Arg Lys Gln Thr Arg Leu		1120
	1125	1130
Thr Ala Ile Asp Ile Leu Thr Thr Cys Ala Ala Asp Ile Gln Arg Gln		1135
	1140	1145
Arg Phe Leu His Cys Thr Glu Lys Asp Leu Ile Pro Tyr Leu Glu Lys		1150
	1155	1160
Leu Ser Asp Ser Thr Leu Lys Glu Thr Leu Leu Asn Gly Val Gly Tyr		1165
	1170	1175
Leu His Glu Gly Leu Ser Pro Met Glu Arg Arg Leu Val Glu Gln Leu		1180
1185	1190	1195
Phe Ser Ser Gly Ala Ile Gln Val Val Val Ala Ser Arg Ser Leu Cys		1200

	1205		1210		1215
Trp Gly Met Asn Val Ala Ala His Leu Val Ile Ile Met Asp Thr Gln					
	1220		1225		1230
Tyr Tyr Asn Gly Lys Ile His Ala Tyr Val Asp Tyr Pro Ile Tyr Asp					
	1235		1240		1245
Val Leu Gln Met Val Gly His Ala Asn Arg Pro Leu Gln Asp Asp Glu					
	1250		1255		1260
Gly Arg Cys Val Ile Met Cys Gln Gly Ser Lys Lys Asp Phe Phe Lys					
1265		1270		1275	1280
Lys Phe Leu Tyr Glu Pro Leu Pro Val Glu Ser His Leu Asp His Cys					
	1285		1290		1295
Met His Asp His Phe Asn Ala Glu Ile Val Thr Lys Thr Ile Glu Asn					
	1300		1305		1310
Lys Gln Asp Ala Val Asp Tyr Leu Thr Trp Thr Phe Leu Tyr Arg Arg					
	1315		1320		1325
Met Thr Gln Asn Pro Asn Tyr Tyr Asn Leu Gln Gly Ile Ser His Arg					
	1330		1335		1340
His Leu Ser Asp His Leu Ser Glu Leu Val Glu Gln Thr Leu Ser Asp					
1345		1350		1355	1360
Leu Glu Gln Ser Lys Cys Ile Ser Ile Glu Asp Glu Met Asp Val Ala					
	1365		1370		1375
Pro Leu Asn Leu Gly Met Ile Ala Ala Tyr Tyr Tyr Ile Asn Tyr Thr					
	1380		1385		1390
Thr Ile Glu Leu Phe Ser Met Ser Leu Asn Ala Lys Thr Lys Val Arg					
	1395		1400		1405
Gly Leu Ile Glu Ile Ile Ser Asn Ala Ala Glu Tyr Glu Asn Ile Pro					
	1410		1415		1420
Ile Arg His His Glu Asp Asn Leu Leu Arg Gln Leu Ala Gln Lys Val					
1425		1430		1435	1440
Pro His Lys Leu Asn Asn Pro Lys Phe Asn Asp Pro His Val Lys Thr					
	1445		1450		1455
Asn Leu Leu Leu Gln Ala His Leu Ser Arg Met Gln Leu Ser Ala Glu					
	1460		1465		1470
Leu Gln Ser Asp Thr Glu Glu Ile Leu Ser Lys Ala Ile Arg Leu Ile					
	1475		1480		1485
Gln Ala Cys Val Asp Val Leu Ser Ser Asn Gly Trp Leu Ser Pro Ala					
	1490		1495		1500
Leu Ala Ala Met Glu Leu Ala Gln Met Val Thr Gln Ala Met Trp Ser					
1505		1510		1515	1520
Lys Asp Ser Tyr Leu Lys Gln Leu Pro His Phe Thr Ser Glu His Ile					
	1525		1530		1535
Lys Arg Cys Thr Asp Lys Gly Val Glu Ser Val Phe Asp Ile Met Glu					
	1540		1545		1550
Met Glu Asp Glu Glu Arg Asn Ala Leu Leu Gln Leu Thr Asp Ser Gln					
	1555		1560		1565
Ile Ala Asp Val Ala Arg Phe Cys Asn Arg Tyr Pro Asn Ile Glu Leu					
	1570		1575		1580
Ser Tyr Glu Val Val Asp Lys Asp Ser Ile Arg Ser Gly Gly Pro Val					
1585		1590		1595	1600
Val Val Leu Val Gln Leu Glu Arg Glu Glu Glu Val Thr Gly Pro Val					
	1605		1610		1615
Ile Ala Pro Leu Phe Pro Gln Lys Arg Glu Glu Gly Trp Trp Val Val					
	1620		1625		1630
Ile Gly Asp Ala Lys Ser Asn Ser Leu Ile Ser Ile Lys Arg Leu Thr					

1635 1640 1645
 Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr
 1650 1655 1660
 Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly
 1665 1670 1675 1680
 Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr
 1685 1690 1695
 Asp Ser Asp Ser Asp
 1700

<210> 2235

<211> 586

<212> DNA

<213> Homo sapiens

<400> 2235

tctagaatga gtatgaggac actctcacca gagtgaggtg aaggtgtata cagctggcac
 60
 tcagtgtctg cacattctcc actggcagaa tgactcccga cgtgggtcgg gctccccgga
 120
 agacaccct cgaagcagt gtgcctctag catcttcgac ctgaggaacc tggcagctga
 180
 ctcattgttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
 240
 agcccttcga cggcagcacc ggcccccggc cctgcttccc ctctaccgg cacctgacga
 300
 ggatgaagcc ggggaacgct gtagccgct agagccacc cgcgagcac tttggacaaa
 360
 ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
 420
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
 480
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca
 540
 cctggcccg ctctgccatc ttctctgtga cctaccctc acgcgt
 586

<210> 2236

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2236

Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
 1 5 10 15
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
 20 25 30
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

	85		90		95
Gly	Pro	His	Leu	Leu	Gly
			Pro	Pro	Ala
				Leu	Ala
				Glu	Arg
				Ala	Thr
				Met	
	100		105		110
Ser	Gln	Leu	Pro	Gly	Ser
			Ser	Gly	Arg
				Arg	Cys
	115		120		

<210> 2237

<211> 421

<212> DNA

<213> Homo sapiens

<400> 2237

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cctaggaagg cacacctgtg tcccactgca gccaaagagga agcaccctcaa acactcctct
60
tggggagcag gagtgctggc cagcttgggg atagtccctg gaagtggctg ggagcactga
120
gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
180
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
240
cacccgtgag aaggagtctt gttgggagca ggggtggggaa gcactgtggg agaggtgtcc
300
ttggctcggg tagcagggac cttgatgtat cttgaagcca gggggccgac tgaggcgctt
360
gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
420
t
421

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<210> 2238

<211> 124

<212> PRT

<213> Homo sapiens

<400> 2238

Met	Glu	Ala	Phe	Arg	Gln	Ala	Pro	Gln	Ser	Ala	Pro	Trp	Leu	Gln	Asp
1			5					10						15	
Thr	Ser	Arg	Ser	Leu	Leu	Pro	Glu	Pro	Arg	Thr	Pro	Leu	Pro	Gln	Cys
			20					25					30		
Phe	Pro	Thr	Leu	Leu	Pro	Thr	Arg	Leu	Leu	Leu	Thr	Gly	Gly	Leu	Ala
		35				40						45			
Gln	Leu	Glu	Pro	Ile	Val	Gln	Val	Leu	Ala	Glu	Glu	Pro	Leu	Ala	
	50				55				60						
Pro	His	Cys	Pro	Thr	Pro	Asp	Gln	Gly	Asp	Ala	Leu	Glu	Glu	Gly	Leu
65				70				75						80	
Asp	Leu	Ser	Ser	Ser	Leu	Ser	Ala	Pro	Asp	His	Phe	Gln	Gly	Leu	Ser
			85					90					95		
Pro	Ser	Trp	Pro	Ala	Leu	Leu	Arg	Pro	Lys	Arg	Ser	Val	Trp	Gly	Ala
			100				105						110		
Ser	Ser	Trp	Leu	Gln	Trp	Asp	Thr	Gly	Val	Pro	Ser				
		115				120									

<210> 2239

<211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct
 60
 agccattcca ggccctgggccc catgggtcacc ccacacaata aggctaagag tccagggtgc
 120
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg ggttgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
 240
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
 300
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgaccc
 360
 atcagtgggt cagttagttc tgcaagaccc ttgggcagct ctcgtggccc tggccggcct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc ggggcggctc
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
 540
 tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
 600
 cccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

Ala	Ser	Arg	Thr	Gln	Lys	Ser	Ala	Val	Glu	His	Lys	Ala	Lys	Lys	Ser
1				5					10				15		
Leu	Ser	His	Pro	Ser	His	Ser	Arg	Pro	Gly	Pro	Met	Val	Thr	Pro	His
		20						25				30			
Asn	Lys	Ala	Lys	Ser	Pro	Gly	Val	Arg	Gln	Pro	Gly	Ser	Ser	Ser	Ser
	35					40					45				
Ser	Ala	Pro	Gly	Gln	Pro	Ser	Thr	Gly	Val	Ala	Arg	Pro	Thr	Val	Ser
	50				55						60				
Ser	Gly	Pro	Val	Pro	Arg	Gln	Asn	Gly	Ser	Ser	Ser	Ser	Gly	Pro	
65				70				75					80		
Glu	Arg	Ser	Ile	Ser	Gly	Ser	Lys	Lys	Pro	Thr	Asn	Asp	Ser	Asn	Pro
			85					90					95		
Ser	Arg	Arg	Thr	Val	Ser	Gly	Thr	Cys	Gly	Pro	Gly	Gln	Pro	Ala	Ser
			100					105					110		
Ser	Ser	Gly	Gly	Pro	Gly	Arg	Pro	Ile	Ser	Gly	Ser	Val	Ser	Ser	Ala
		115				120						125			
Arg	Pro	Leu	Gly	Ser	Ser	Arg	Gly	Pro	Gly	Arg	Pro	Val	Ser	Ser	Pro
	130					135					140				
His	Glu	Leu	Arg	Arg	Pro	Val	Ser	Gly	Leu	Gly	Pro	Pro	Gly	Arg	Ser
145					150					155				160	
Val	Ser	Gly	Pro	Gly	Arg	Ser	Ile	Ser	Gly	Pro	Ile	Pro	Ala	Gly	Arg

				165					170					175					
Thr	Val	Ser	Asn	Ser	Val	Pro	Gly	Arg	Pro	Val	Ser	Ser	Leu	Gly	Pro				
			180					185					190						
Gly	Gln	Thr	Val	Ser	Ser	Ser	Gly	Pro	Thr	Ile	Lys	Pro	Lys	Cys					
		195					200					205							

<210> 2241
 <211> 656
 <212> DNA
 <213> Homo sapiens

<400> 2241
 nnacgcgtga agggcagcag caacaccacg gagtgtgttc ccgtgcccac ctccgagcac
 60
 gtggccgaga tcgtgggcag gcaaggctgc aagattaagg ccttgagggc caagaccaac
 120
 acctacatta gaaccccgagg aaggggagcag gaaccagtgt tcatgggtgac agggcgacgg
 180
 gaggacgtgg ccacagcccg gcgggaaatc atctcagcag cggagcactt ctccatgatc
 240
 cgtgcctccc gcaacaagtc aggcgcgcgc tttggtgtgg ctctgtctct gcccggccag
 300
 gtgaccatcc gtgtgcgggg gccctaccgc gtggtggggc tgggtgggtgg ccccaaaggg
 360
 gcaaccatca agcgcattcca gcagcaaacc aacacataca ttatcacacc aagccgtgac
 420
 cgcgaccccg tgttcgagat cacgggtgcc ccaggcaacg tggagcgtgc gcgcgaggag
 480
 atcgagacgc acatcgcggt gcgcactggc aagatcctcg agtacaacaa tgaaaacgac
 540
 ttcctggcgg ggagccccga cgcagcaatc gatagccgct actccgacgc ctggcgggtg
 600
 caccagcccg gctgcaagcc cctctccacc ttccggcaga acagcctggg ctgcag
 656

<210> 2242
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 2242
 Xaa Arg Val Lys Gly Ser Ser Asn Thr Thr Glu Cys Val Pro Val Pro
 1 5 10 15
 Thr Ser Glu His Val Ala Glu Ile Val Gly Arg Gln Gly Cys Lys Ile
 20 25 30
 Lys Ala Leu Arg Ala Lys Thr Asn Thr Tyr Ile Arg Thr Pro Gly Arg
 35 40 45
 Gly Glu Glu Pro Val Phe Met Val Thr Gly Arg Arg Glu Asp Val Ala
 50 55 60
 Thr Ala Arg Arg Glu Ile Ile Ser Ala Ala Glu His Phe Ser Met Ile
 65 70 75 80
 Arg Ala Ser Arg Asn Lys Ser Gly Ala Ala Phe Gly Val Ala Pro Ala
 85 90 95
 Leu Pro Gly Gln Val Thr Ile Arg Val Arg Val Pro Tyr Arg Val Val

```

      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

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<210> 2243

<211> 384

<212> DNA

<213> Homo sapiens

<400> 2243

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gaattcagca tttaaagtgc actcggtggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaataaa
180
tccttaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcctggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgcctccc tgtgctcgcc tgtcttgttt
360
tacctcccat cctgggacct tgga
384

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<210> 2244

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2244

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Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
      65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

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85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggacgtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgctatt
 120
 gagggccaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catggtgttt
 180
 gcggccgaac tgtcgcaccg gtacctggga ctgtccgatg aggtcgttgc gcgcaccgc
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag
 420
 gccgctttag ccgagtgcta cgaccgggtg tccgcacggg aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccataccgga
 600
 cttaagtcca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

115 120 125
 Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
 130 135 140
 Glu Cys Tyr Asp Arg Cys Ser Ala Arg
 145 150

<210> 2247
 <211> 324
 <212> DNA
 <213> Homo sapiens

<400> 2247
 gggcggttcgc ctccagggtt ctccccgaca ctggatgcca acctgcccag gggcagaagg
 60
 gaggttgggc gtggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
 120
 cctcttaatc ttggcgcgac agcacctggg agcttttaaag agacccccac gccctgggag
 180
 cccccaccgc tgaccacccc gatctcagct ctgcctttcc cgcctctctg ctggggttgca
 240
 taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
 300
 tgtgccgtgt gagccatccc cctg
 324

<210> 2248
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2248
 Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
 1 5 10 15
 Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
 20 25 30
 Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
 35 40 45
 Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
 50 55 60
 Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
 65 70 75 80
 Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
 85 90 95
 Val Gly Glu Asn Pro Gly Gly Glu Arg
 100 105

<210> 2249
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2249
 gaaaaccgga taacagggtg tatacaagcc tctgagttct gggagcaaca accagctcaa
 60

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattcccac
 120
 ggtggaaacc gcggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcgggtt tagcacccctc
 240
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggcttgggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggccc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1				5					10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
			20					25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35				40						45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
	50					55					60				
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70					75				80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
			85					90						95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
							100								

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtccgttc agttgttgca
 60
 gtggaatagt cagggttaaatt ttaatgtgac cgtttatcgc aatctgccga ccactcgcca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgagggtt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtaggttt tctgcttagg
 240
 agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggtttctca cttctgttac tccagcttct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtcaa cgttatattt tgatagtttg acgggttaatg ctggtaatgg tgggttttct
 420

cattgcattc agatggatac atctgtcaac gccgctaac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt tttgcctggt tggttcgctt tgagtcttct
 540
 tcggttccga ctaccctccc gactgcctat gatgtttatc ctttggtatg tcgccatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg
 654

<210> 2252
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2252
 Met Phe Gln Thr Phe Ile Ser Arg His Asn Ser Asn Phe Phe Ser Asp
 1 5 10 15
 Lys Leu Val Leu Thr Ser Val Thr Pro Ala Ser Ser Ala Pro Val Leu
 20 25 30
 Gln Thr Pro Lys Ala Thr Ser Ser Thr Leu Tyr Phe Asp Ser Leu Thr
 35 40 45
 Val Asn Ala Gly Asn Gly Gly Phe Leu His Cys Ile Gln Met Asp Thr
 50 55 60
 Ser Val Asn Ala Ala Asn Gln Val Val Ser Val Gly Ala Asp Ile Ala
 65 70 75 80
 Phe Asp Ala Asp Pro Lys Phe Phe Ala Cys Leu Val Arg Phe Glu Ser
 85 90 95
 Ser Ser Val Pro Thr Thr Leu Pro Thr Ala Tyr Asp Val Tyr Pro Leu
 100 105 110
 Asp Gly Arg His Asp Gly Gly Tyr Tyr Thr Val Lys Asp Cys Val Thr
 115 120 125
 Ile Asp Val Leu Pro Arg Thr
 130 135

<210> 2253
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2253
 ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgctc attattcgct
 60
 cactgagcac cagcaagcag gccgcctgg attgcccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcggcgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgtct
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254

```

Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1           5           10           15
Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
          20           25           30
Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
          35           40           45
Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
          50           55           60
Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
65           70           75           80
Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
          85           90           95
Leu Thr Ala Leu
          100

```

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255

```

nngctagcac atgagaagtg tgaagtttat actttgcttg ggcgatcacg ccgttttcca
60
aatatggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
120
cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
180
actcgtctta aggagcttgg ttggacgcta ctcttgaggg tgcattgatga agtgatactg
240
gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag
300
cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgcaa gtgtgca
357

```

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256

```

Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1           5           10           15
Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
          20           25           30
Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
          35           40           45
Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
          50           55           60
Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

```

65          70          75          80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
          85          90          95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
          100          105          110
Ala Val Asp Ala Lys Cys Ala
          115

```

<210> 2257
 <211> 626
 <212> DNA
 <213> Homo sapiens

```

<400> 2257
nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcaaaaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agaggttgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggt
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttcctaggaa ggaaaatgaa
360
gagcatgaca ggctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata
420
tatcctgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
cataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

```

<210> 2258
 <211> 187
 <212> PRT
 <213> Homo sapiens

```

<400> 2258
Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1          5          10          15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
20          25          30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
35          40          45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
50          55          60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65          70          75          80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

```

      85              90              95
Leu Thr Asp Gly Thr Thr Val Gly Asn Asp Asp Asp Gly Leu Asn Gln
      100              105              110
Gln Ile Pro Arg Lys Glu Asn Glu Glu His Asp Arg Pro Ala Asp Lys
      115              120              125
Thr Ala Asn Glu Lys Asn Lys Val Lys Asn Gln Ile Tyr Pro Glu Ala
      130              135              140
Asp Phe Ala Asp Ser Met Glu Pro Ser Glu Ile Ala Ser Glu Asp Cys
      145              150              155              160
Glu Leu Ser His Ser Val Tyr Glu Asn Phe Met Leu Leu Ile Glu Gln
      165              170              175
Leu Arg Met Glu Tyr Lys Gly Arg Thr Thr Ala
      180              185

```

<210> 2259
 <211> 425
 <212> DNA
 <213> Homo sapiens

```

<400> 2259
acgcgtcaca atgataaagc cattatattc atcaagaggt aaatcattct tgaaattttc
60
taaaggtaaa cacttacgtg taacacgttc atcaaagaat tcaggaacca catattctgg
120
acggatcatct acgactgtaa cacgacagcc aataaacaat agcaaatacag taatagctcg
180
gctaacaatga cctgcaccta atacgagaac tgacggatca ttttctacag gttgtacgaa
240
acactccatt tcgcctacca tgcatagaga attcagcttt gctttatcta cagtaaattcc
300
ttcaaatagga gttccgtata gaacccttcc atcttcagca taaatagtct tatcccttg
360
acgaggaccg gatagaacgg taaccattac ggtagcttca gtaacctgta gacgattttt
420
catga
425

```

<210> 2260
 <211> 141
 <212> PRT
 <213> Homo sapiens

```

<400> 2260
Met Lys Asn Arg Leu Gln Val Thr Glu Ala Thr Val Met Val Thr Val
1      5      10      15
Leu Ser Gly Pro Arg Gln Gly Asp Lys Thr Ile Tyr Ala Glu Asp Gly
20     25     30
Arg Val Leu Tyr Gly Thr Pro Ile Glu Gly Phe Thr Val Asp Lys Ala
35     40     45
Lys Leu Asn Ser Leu Cys Met Val Gly Glu Met Glu Cys Phe Val Gln
50     55     60
Pro Val Glu Asn Asp Pro Ser Val Leu Val Leu Gly Ala Gly His Val
65     70     75     80
Ser Arg Ala Ile Thr Asp Leu Leu Leu Phe Ile Gly Cys Arg Val Thr

```

				85					90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu			
			100						105					110				
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu			
		115					120						125					
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg						
		130				135						140						

<210> 2261
 <211> 660
 <212> DNA
 <213> Homo sapiens

<400> 2261
 ngctagctgc tgctcctgag gatcggccgc agaattattgc tgccgatctg tccgggttgc
 60
 ttgagcccaa gcgcgaggtc gatgtgtccg gcgaccgcgc gcgttgcggt gggagcatag
 120
 tgtcggtgca cgctgaccga gaggtccgtg cggagagtac tcccgatgat atttgcgggc
 180
 agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg
 240
 acgatgccgg gaggtcttcc gacaagcttc actgaacggt gttcaattgg tcccaacggc
 300
 tgcccatgtg ggcagccgct ctatctcgtc atgggaagga acccgatgtc gtcacgcaat
 360
 gggttccagg ccaccgacct ggctcttacc gcggtctttg cagccctcat tgctgtgcta
 420
 gccgtcatcc cgccgatgtt catggtgggg gcggtccctt ttgcccttca gatgggtgcc
 480
 gtcattgctg cgccgatggt gctgggaagt atccgtggcg gatgcgcggt aggcttgtat
 540
 atccttgtcg gcgcgctggg gctgcccgtc ttcagcgggt ggtctagcgg gattggcgtc
 600
 ctggtgggtc cactggtgg gtatctatgg ggatggctga tcggcgcttt cgtggcgggt
 660

<210> 2262
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2262
 Met Pro Gly Gly Ser Ser Thr Ser Phe Thr Glu Arg Cys Ser Ile Gly
 1 5 10 15
 Pro Asn Gly Cys Pro Cys Gly Gln Pro Leu Tyr Leu Val Met Gly Arg
 20 25 30
 Asn Pro Met Ser Ser Arg Asn Gly Phe Gln Ala Thr Asp Leu Ala Leu
 35 40 45
 Ile Ala Val Phe Ala Ala Leu Ile Ala Val Leu Ala Val Ile Pro Pro
 50 55 60
 Met Phe Met Val Gly Ala Val Pro Phe Ala Leu Gln Met Val Ala Val
 65 70 75 80
 Met Leu Ala Pro Met Val Leu Gly Ser Ile Arg Gly Gly Cys Ala Val

				85					90					95					
Gly	Leu	Tyr	Ile	Leu	Val	Gly	Ala	Leu	Gly	Leu	Pro	Val	Phe	Ser	Gly				
				100					105					110					
Gly	Ser	Ser	Gly	Ile	Gly	Val	Leu	Val	Gly	Pro	Thr	Gly	Gly	Tyr	Leu				
		115					120						125						
Trp	Gly	Trp	Leu	Ile	Gly	Ala	Phe	Val	Ala	Gly									
	130						135												

<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

```

nacgcgttcc cggtcgaccg aggcaaaggc aaaagtaagc aggggtgccc tagtccccgt
60
tcccaccgcg gtatggctgg gtcactgctg acagatggcg tccccctgct gatctttccg
120
gagggcaccc ggtctcgac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctattttcac gtgggggttcc gggtatcccc attgcttttag taggagcatg ggcggctatg
240
ccgtccgagc aagccaggtt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
360
gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac
420
ggacgccacc gcgcgctaag ccaggcctcc gagagcggcg acaccgcac caccaaccac
480
tcgacgtgca c
491

```

<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

Xaa	Ala	Phe	Pro	Val	Asp	Arg	Gly	Lys	Gly	Lys	Ser	Lys	Gln	Gly	Ala				
1				5					10					15					
Arg	Ser	Pro	Arg	Ser	His	Arg	Gly	Met	Ala	Gly	Ser	Leu	Leu	Thr	Asp				
		20					25					30							
Gly	Val	Pro	Leu	Leu	Ile	Phe	Pro	Glu	Gly	Thr	Arg	Ser	Arg	Thr	Gly				
	35					40					45								
Ala	Met	Gly	Thr	Phe	Lys	Pro	Gly	Ala	Ala	Ala	Leu	Ala	Ile	Ser	Arg				
	50				55						60								
Gly	Val	Pro	Val	Ile	Pro	Ile	Ala	Leu	Val	Gly	Ala	Trp	Ala	Ala	Met				
65				70					75					80					
Pro	Ser	Glu	Gln	Ala	Arg	Leu	Pro	Lys	Gly	Arg	Pro	Leu	Val	His	Val				
			85			90							95						
Ala	Ile	Gly	His	Pro	Met	Asp	Pro	Val	Pro	Gly	Glu	Ile	Ala	His	Gln				
		100				105						110							
Phe	Ser	Glu	Arg	Ile	Arg	Arg	Gln	Val	Ile	Glu	Leu	His	Asp	Gln	Thr				


```

      115              120              125
Ala Arg Ala Tyr Gly Met Pro Thr Leu Asp Glu Tyr Gly Arg His Arg
      130              135              140
Ala Leu Ser Gln Ala Ser Glu Ser Gly Asp Thr Ala Ser Thr Asn His
145              150              155              160
Ser Thr Cys

```

<210> 2265
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 2265
ccatgggaat aggccaaacac ggatggatct actgtataac ttgcctgcca tcaggaaaga
60
gtcaacacgg cagacacatg ctggcagaaa cctgctgga gttgccctg agcattgatg
120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggct cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
tttagcacgt gactgggacc actggaca
328

```

<210> 2266
 <211> 100
 <212> PRT
 <213> Homo sapiens

```

<400> 2266
Met Gly Ile Gly Gln His Gly Trp Ile Tyr Cys Ile Thr Cys Leu Pro
 1              5              10              15
Ser Gly Lys Ser Gln His Gly Arg His Met Leu Ala Glu Thr Leu Leu
      20              25              30
Glu Leu Pro Leu Ser Ile Asp Ala Tyr His Pro Arg Gly Gly Glu Gly
      35              40              45
Gly Gly Arg Asn Gln Ile Arg Val Gln Asn Ala Pro Glu Gly Leu Gly
      50              55              60
Asn Val Arg Leu His Leu Ala Gly Thr Val Asn Ala Thr Thr Asn Ile
65              70              75              80
Thr His Leu Arg Gln Ala Leu Glu Ser Ser Cys Glu His Asn Ser Leu
      85              90              95
Thr Pro Asn Leu
      100

```

<210> 2267
 <211> 370
 <212> DNA
 <213> Homo sapiens

<400> 2267

agatctatgc aggtagcgct ggtctccggg gggtaagttg tccactccct gtcagatggc
 60
 agaccatgga gggctaatagc aggctgggaa ggctaggcag agttcccaga aacagggtcac
 120
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt cttaccctg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2268
 Met Ala Asp His Gly Gly Leu Met Gln Ala Gly Lys Ala Arg Gln Ser
 1 5 10 15
 Ser Gln Lys Gln Val Thr Glu Gly Ala Thr Thr Glu Leu His Ser Arg
 20 25 30
 Trp Gly Val Lys Pro Tyr Pro Pro Lys Thr Ala Val Thr Gly Val Ala
 35 40 45
 Asn Leu Tyr Arg Asp Arg Leu Lys Ala Thr Ala Thr Gln Gly Thr Glu
 50 55 60
 Met Val Lys Gln Ala Cys Pro Lys Ala Ser Leu Leu Asn Pro Asp Leu
 65 70 75 80
 Glu Gly Gln Glu Thr Ser His Leu Arg Met Leu
 85 90

<210> 2269
 <211> 507
 <212> DNA
 <213> Homo sapiens

<400> 2269
 ctctccgacc gcgtcaaccc cggcaatatc cgcaagttcg acgaccagat cgaatcgatt
 60
 tgtaaggctg ccaccgagca cggtagcagc atccgaatcg gcgtgaatgc tgggtctctc
 120
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggt ggagtgcgga
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgcaa atgcgattat
 300
 ccccttcatt tgggcgttac tgaggctggt ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggt atcggcgata ccatacgcgt ctccttgctc
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctctctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
 Leu Ser Asp Arg Val Asn Pro Gly Asn Ile Arg Lys Phe Asp Asp Gln
 1 5 10 15
 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Glu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
 nncgccgacc cggacttcca ggagatgtta cgtgcgctgg tggacttcga cgaagacatc
 60
 ccgatggctc acgaaagcct ggaacagttc gccagttgc tcaaaaccgc cacctcggaa
 120
 gaaggcatgg cgccgttgac ctccggacgcg gtggcgcggt tggccactta cagcgcacgg
 180
 ctggcggacc accaagggcg tgtgtccgcg cgcattggcg acttggtcca actgggtcagc
 240
 gaggcggact ttatccgcca cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
 300
 cgggcgctca aggccaaaggc cacgcgtacc gggcgtgtat cggcgcggat tctcgacgac
 360
 atgctcgtcg gggtcatect gatcgacacc gccggtgcgg ccgtgggcaa atgcaacggg
 420

ctgacggtgc tggaagtcgg cgattcggcg ttcggcgtgc cggcgcggaat ttccgccacg
480
gtgtaccccg gcggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg
540
atccactcca agggcgtgat gaccttacc ggt
573

<210> 2272

<211> 191

<212> PRT

<213> Homo sapiens

<400> 2272

Xaa	Ala	Asp	Pro	Asp	Phe	Gln	Glu	Met	Leu	Arg	Ala	Leu	Val	Asp	Phe
1				5					10					15	
Asp	Glu	Asp	Ile	Pro	Met	Val	Asp	Glu	Ser	Leu	Glu	Gln	Phe	Ala	Gln
			20					25					30		
Leu	Leu	Lys	Thr	Arg	Thr	Ser	Glu	Gly	Met	Ala	Pro	Leu	Thr	Ser	
		35					40				45				
Asp	Ala	Val	Ala	Arg	Leu	Ala	Thr	Tyr	Ser	Ala	Arg	Leu	Ala	Asp	His
	50					55					60				
Gln	Gly	Arg	Val	Ser	Ala	Arg	Ile	Gly	Asp	Leu	Phe	Gln	Leu	Val	Ser
65					70				75					80	
Glu	Ala	Asp	Phe	Ile	Arg	His	Leu	Ala	Gly	Asp	Glu	Met	Thr	Asp	Ala
				85					90					95	
Gly	His	Ile	Glu	Arg	Ala	Leu	Lys	Ala	Lys	Ala	Thr	Arg	Thr	Gly	Arg
			100					105					110		
Val	Ser	Ala	Arg	Ile	Leu	Asp	Asp	Met	Leu	Ala	Gly	Val	Ile	Leu	Ile
		115					120						125		
Asp	Thr	Ala	Gly	Ala	Ala	Val	Gly	Lys	Cys	Asn	Gly	Leu	Thr	Val	Leu
		130					135					140			
Glu	Val	Gly	Asp	Ser	Ala	Phe	Gly	Val	Pro	Ala	Arg	Ile	Ser	Ala	Thr
145					150					155				160	
Val	Tyr	Pro	Gly	Gly	Ser	Gly	Ile	Val	Asp	Ile	Glu	Arg	Glu	Val	Asn
				165					170					175	
Leu	Gly	Gln	Pro	Ile	His	Ser	Lys	Gly	Val	Met	Ile	Leu	Thr	Gly	
			180					185						190	

<210> 2273

<211> 4355

<212> DNA

<213> Homo sapiens

<400> 2273

tctttccagc atgcctccgg cttcttgggg gaacacagtc ccggtgggtca gaggtcctgc
60
aggggaggcc tctctctgga acgcctaccc aactccatcg cctcccgctt ccgcctgaca
120
gagagggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc
180
ctgcaggaat tggagaagac cacaaataac agcacgtcga ggcattctgaa aggctgtcac
240
ccgcttgact atgagctcac ctacttcctg gaagctgccc tccagagcgc ctatgtgaaa
300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgaggact
360
gtggagacca aagcaactca gaacttcaaa gtgatggcgg ccaagcacct ggcggggggtc
420
ctgctgcact ccctgagtgg agtgctactg gagccccctg tcccaccctc tgcctgagtt
480
atgggcaagg aggagagtcc ttctgccact caggccctgc ggaaacctca cctctatgaa
540
ggagacaacc tctactgccc caaggacaac atcgaggaag ccctcctgct cctcctcatc
600
agcgaatcca tggcaactcg agatgtggtg ctgagccggg tgccggagca ggaggaggac
660
cggacagtga gcttgcagaa tgccgcagcc atctatgacc tctgagcat cacgttgggc
720
agaaggggac agtacgtcat gctctcggag tgccctggagc gagccatgaa gtttgcgttt
780
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 <211> 158
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Cys Phe Glu Arg Ala Ser Trp Ile Ala Gln Val Phe Leu Gln Glu Leu
 50 55 60
 Glu Lys Thr Thr Asn Asn Ser Thr Ser Arg His Leu Lys Gly Cys His
 65 70 75 80
 Pro Leu Asp Tyr Glu Leu Thr Tyr Phe Leu Glu Ala Ala Leu Gln Ser
 85 90 95
 Ala Tyr Val Lys Asn Leu Lys Lys Gly Asn Ile Val Lys Gly Met Arg
 100 105 110
 Glu Leu Arg Glu Val Leu Arg Thr Val Glu Thr Lys Ala Thr Gln Asn
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150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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Lys	Pro	Ser	Val	Ser	Ala	Phe	Thr	His	Ser	Pro	Pro	Glu	Asn	Thr	Thr
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Gly	Ile	Ser	Ser	Thr	Ile	Ser	Phe	His	Ser	Arg	Thr	Leu	Asn	Leu	Thr
65				70					75					80	
Asp	Val	Ile	Glu	Glu	Leu	Ala	Gln	Ala	Ser	Thr	Gln	Thr	Leu	Lys	Ser
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Thr	Thr	Arg	Lys	Ala	Ile	Ile	Arg	His	Ser	Thr	Ile	Pro	Pro	Phe	Leu
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 <212> DNA
 <213> Homo sapiens

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 Cys Cys Pro Pro Trp Leu Ser Ser Pro Pro Ala Ala Cys Leu Pro Ser
 35 40 45
 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
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<210> 2279
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<210> 2280
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<400> 2280
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 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
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 Gly Thr Ser Phe Thr Pro Ala Cys Ile Ser Ser Leu Ser His Gly Ser
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 300

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<210> 2282
 <211> 96
 <212> PRT
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<400> 2282
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 20 25 30
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 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
 50 55 60
 Ile Asp Ala Lys Lys Pro Phe Ser Leu Lys Ala Asp Gly Glu Asn Pro
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<210> 2284
 <211> 122
 <212> PRT
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<400> 2284
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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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Glu	Leu	Trp	Pro	Arg	Ala	Leu	Arg	Lys	Arg	Asp	Val	Ser	Val	Arg	Arg
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Glu	Thr	Arg	Arg	Arg	Gly	Gly	Leu	Gly	Arg	Ala	His	Ile	Arg	Ala	His
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Thr	Pro	Ala	Cys	His	Leu	Leu	Gly	Glu	Val	Gln	Asp	Pro	Glu	Leu	Glu
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Gln	Leu	Ser	Asn	Glu	Asp	Tyr	Phe	Ile	Glu	Pro	Leu	Asp	Ser	Ala	Pro
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Pro	Glu	Arg	Leu	Ala	Gln	Arg	Gly	Asp	Ser	Ser	Ala	Pro	Ser	Thr	Cys

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Ala	Ala	Ala	Val	Ala	Ala	Ala	Thr	Ala	Arg	Arg	Leu	His	Gln	Arg	Ser
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Pro	Ile	His	Ile	Thr	Ile	Val	Arg	Leu	Val	Leu	Leu	Glu	Asp	Glu	Glu
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Glu	Asp	Leu	Lys	Ile	Thr	His	His	Ala	Asp	Asn	Thr	Leu	Lys	Ser	Phe
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Cys	Lys	Trp	Gln	Lys	Ser	Ile	Asn	Met	Lys	Gly	Asp	Ala	His	Pro	Leu
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His	His	Asp	Thr	Ala	Ile	Leu	Leu	Thr	Arg	Lys	Asp	Leu	Cys	Ala	Ala
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Cys	Gln	Pro	His	Arg	Ser	Cys	Ser	Ile	Asn	Glu	Asp	Thr	Gly	Leu	Pro
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Leu	Ala	Phe	Thr	Val	Ala	His	Glu	Leu	Gly	His	Ser	Phe	Gly	Ile	Gln
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His	Asp	Gly	Ser	Gly	Asn	Asp	Cys	Glu	Pro	Val	Gly	Lys	Arg	Pro	Phe
				405					410					415	
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Arg	Cys	Ser	Arg	Gln	Tyr	Ile	Thr	Arg	Phe	Leu	Asp	Arg	Gly	Trp	Gly
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Val	Pro	Pro	Gly	Val	Leu	Tyr	Asp	Val	Ser	His	Gln	Cys	Arg	Leu	Gln
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Tyr	Gly	Ala	Tyr	Ser	Ala	Phe	Cys	Glu	Asp	Met	Asp	Asn	Val	Cys	His
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Thr	Leu	Trp	Cys	Ser	Val	Gly	Thr	Thr	Cys	His	Ser	Lys	Leu	Asp	Ala
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Glu	Cys	Val	Pro	Val	Gly	Phe	Arg	Pro	Glu	Ala	Val	Asp	Gly	Gly	Trp
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Ser	Gly	Trp	Ser	Ala	Trp	Ser	Ile	Cys	Ser	Arg	Ser	Cys	Gly	Met	Gly
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 Cys Tyr Gln Val Arg Ala Ser Arg Asp Leu Cys Ile Asn Gly Ile Cys
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 Lys Asn Val Gly Cys Asp Phe Glu Ile Asp Ser Gly Ala Met Glu Asp
 675 680 685
 Arg Cys Gly Val Cys His Gly Asn Gly Ser Thr Cys His Thr Val Ser
 690 695 700
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 Gly Thr Thr Phe Thr Tyr Ala Arg Arg Gly Asn Trp Glu Asn Leu Thr
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 Glu Pro Gly Ser Glu Pro Gly Pro Pro Ala Ala Ala Ser Thr Ser Val
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 Ser Pro Ser Leu Lys Trp Pro Asn Leu Val Ala Ala Val His Arg Gly
 850 855 860
 Gly Trp Gly Gln Ala Pro Leu Gly Leu Gly Gly Trp Arg Arg His Leu
 865 870 875 880
 Val Leu Met Gly Pro Arg Leu Pro Thr Gln Leu Leu Phe Gln Glu Ser
 885 890 895
 Asn Pro Gly Val His Tyr Glu Tyr Thr Ile His Arg Glu Ala Gly Gly
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 His Asp Glu Val Pro Pro Pro Val Phe Ser Trp His Tyr Gly Pro Trp
 915 920 925
 Thr Lys Cys Thr Val Thr Cys Gly Arg Gly Val Gln Arg Gln Asn Val
 930 935 940
 Tyr Cys Leu Glu Arg Gln Ala Gly Pro Val Asp Glu Glu His Cys Asp
 945 950 955 960
 Pro Leu Gly Arg Pro Asp Asp Gln Gln Arg Lys Cys Ser Glu Gln Pro
 965 970 975
 Cys Pro Ala Arg Trp Trp Ala Gly Glu Trp Gln Leu Cys Ser Ser Ser
 980 985 990
 Cys Gly Pro Gly Gly Leu Ser Arg Arg Ala Val Leu Cys Ile Arg Ser
 995 1000 1005
 Val Gly Leu Asp Glu Gln Ser Ala Leu Glu Pro Pro Ala Cys Glu His
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 Leu Pro Arg Pro Pro Thr Glu Thr Pro Cys Asn Arg His Val Pro Cys
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Gly	Ser Gly Ser Ser Ser His	Glu Leu Phe Asn Glu Ala	Asp Phe Ile		
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Gly	Gly Thr Val Ala Trp Glu	Pro Ala Leu Glu Gly Gly	Leu Gly Pro		
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Val	Asp Ser Glu Leu Trp Pro	Thr Val Gly Val Ala Ser	Leu Leu Pro		
	1380	1385	1390		
Pro	Pro Ile Ala Pro Leu Pro	Glu Met Lys Val Arg Asp	Ser Ser Leu		
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Glu	Pro Gly Thr Pro Ser Phe	Pro Ala Pro Gly Pro Gly	Ser Trp Asp		
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Gln	Pro Glu Ser Leu Ser Pro	Glu Val Pro Leu Ser Ser	Arg Leu Leu		
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Ser	Thr Pro Ala Trp Asp Ser	Pro Ala Asn Ser His Arg	Val Pro Glu		
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<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

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		20						25				30			
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu	
	35						40				45				
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
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Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65				70						75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
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Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
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<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

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 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta
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<210> 2290
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2290
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 20 25 30
 Ile Asp Tyr Thr Gly Gly Leu Lys His Gln Ile Leu Gln Ser His Gly
 35 40 45
 Gln Asp Ala Glu Leu Ser Gly Thr Leu Ser Leu Val Leu Thr Gln Gly
 50 55 60
 Cys Lys Arg Ile Xaa Arg Gly Tyr Trp Phe Lys Asn Trp Pro Pro Thr
 65 70 75 80
 Thr Lys Thr Ser Thr Ala Val Phe Leu Gly Leu Glu Lys Pro Leu Met
 85 90 95
 Arg Ile His Phe
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<210> 2291
 <211> 573
 <212> DNA
 <213> Homo sapiens

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 120
 aagtggtcga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc
 180
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 240
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573

<210> 2292
<211> 140
<212> PRT
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<400> 2292
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Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
35 40 45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
50 55 60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
65 70 75 80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
85 90 95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
100 105 110
Arg Tyr Val Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
115 120 125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
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<210> 2293
<211> 358
<212> DNA
<213> Homo sapiens

<400> 2293
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120
gaggagatca agcggcagtt ccaaggtctg cattgggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tgggcccacgc tcatggccgg gtcctctttc
240
gaggcgaatc cgcgcatata gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
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358

<210> 2294
<211> 115
<212> PRT
<213> Homo sapiens

<400> 2294
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      20             25             30
Met Lys Pro Thr Glu Glu Ile Lys Arg Gln Phe Gln Gly Leu His Trp
      35             40             45
Leu Gly Arg Lys Tyr Gly Leu Asn His Gly Glu Phe Tyr Leu Asp Asp
      50             55             60
Glu Gln Trp Ala Thr Leu Met Ala Gly Ser Ser Phe Glu Ala Asn Pro
      65             70             75             80
Arg Ile Lys Ser Asn Phe Asp Ser Glu Gly Ala Val Val Asp Pro Asp
      85             90             95
Ser Asp Ser Leu Ala Gly Ala Asp Arg Asp Ala Arg Gly Ala Ser Asp
      100             105             110
Ala Cys Leu
      115

```

<210> 2295
 <211> 546
 <212> DNA
 <213> Homo sapiens

```

<400> 2295
ggcaccgatc cgagtgggtgg tgccggggatt aggnccggatc tanaaacatt ctccgccctt
60
ggggcgatatg gctgctcggt cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gcggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg cgggagggcg cggcgctgct ggatgcgcct
420
catgcccgtg ccgagcacga gatgaaagag cagggggcgc cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

```

<210> 2296
 <211> 182
 <212> PRT
 <213> Homo sapiens

```

<400> 2296
Gly Thr Asp Pro Ser Gly Gly Ala Gly Ile Arg Xaa Asp Leu Xaa Thr
1             5             10             15
Phe Ser Ala Leu Gly Ala Tyr Gly Cys Ser Val Ile Thr Ala Leu Val
      20             25             30
Ala Gln Asn Thr Arg Gly Val Gln Ser Val Tyr Arg Ile Glu Pro Asp

```



```

      35              40              45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
      50              55              60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
65              70              75              80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
      85              90              95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
      100             105             110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
      115             120             125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
      130             135             140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
145             150             155             160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
      165             170             175
Asp Trp Leu Phe Thr Arg
      180

```

<210> 2297
 <211> 414
 <212> DNA
 <213> Homo sapiens

```

<400> 2297
gggaattccg ggccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaaagg
60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
120
caccccccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgagggtct ctgggtaata
240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaacactggg
360
gatctgaccc acatgtaaag tctgatttct ttggtctggg gcaggcctga aatn
414

```

<210> 2298
 <211> 67
 <212> PRT
 <213> Homo sapiens

```

<400> 2298
Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
1              5              10              15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
      20              25              30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
      35              40              45
Phe Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

```

50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
ngagatgtct aagttatttt ttttttcccg gaaggcaa at ggctggcg tg gaagcacaac
60
ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctctgaccca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga
240
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg
300
cgcaagtcct ctcatatccc taaactgtca ggaaggcacc ggattgttgt tccccacatc
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaaat tatatttcct gttcctagtt gtcctgaact gggtagccttt ggtagaagcc
540
ttccaaaagg aaatcaccat gttgcctctg gtgggtggcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttttaataact
660
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttgcctctc ctgcaacgag gtcacccctg cagacatggg actactcttt
780
tccactgatc cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaaacaga ggcagggtgg tccgggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

```

                20                25                30
Leu Leu Ala Cys Gly Arg Lys Ser Ser Gln Ile Pro Lys Leu Ser Gly
      35                40                45
Arg His Arg Ile Val Val Pro His Ile Gln Pro Phe Lys Asp Glu Tyr
      50                55                60
Glu Lys Phe Ser Gly Ala Tyr Val Asn Asn Arg Ile Arg Thr Thr Lys
65      70                75                80
Tyr Thr Leu Leu Asn Phe Val Pro Arg Asn Leu Phe Glu Gln Phe His
      85                90                95
Arg Ala Ala Asn Leu Tyr Phe Leu Phe Leu Val Val Leu Asn Trp Val
      100                105                110
Pro Leu Val Glu Ala Phe Gln Lys Glu Ile Thr Met Leu Pro Leu Val
      115                120                125
Val Val Leu Thr Ile Ile Ala Ile Lys Asp Gly Leu Glu Asp Tyr Arg
      130                135                140
Lys Tyr Lys Ile Asp Lys Gln Ile Asn Asn Leu Ile Thr Lys Val Tyr
145      150                155                160
Ser Arg Lys Glu Lys Lys Tyr Ile Asp Arg Cys Trp Lys Asp Val Thr
      165                170                175
Val Gly Asp Phe Ile Arg Leu Ser Cys Asn Glu Val Ile Pro Ala Asp
      180                185                190
Met Val Leu Leu Phe Ser Thr Asp Pro Asp Gly Ile Cys His Ile Glu
      195                200                205
Thr Ser Gly Leu Asp Gly Glu Ser Asn Leu Lys Gln Arg Gln Val Val
      210                215                220
Arg Gly Tyr Ala Glu Gln Asp Ser Glu Val Asp Pro Glu Lys Phe Ser
225      230                235                240
Ser Arg Ile Glu Cys Glu Ser Pro Asn Asn Asp Leu Ser Arg Phe Arg
      245                250                255
Gly Phe Leu Glu His Ser Asn Lys Glu Arg
      260                265

```

<210> 2301

<211> 390

<212> DNA

<213> Homo sapiens

<400> 2301

tatcccaagc gcttcaaatt tgatgccgat gagttctact tgaaatcgtc cgaggaaatg
60

nncgccacct cttccgcgna tttccctgaa gcctgcgata acactatgga aatcgctgag
120

nncgttgcca cggtgaattc aacacaaacg caanactaca tgcccgattt cccaccccg
180

gagggggaga atgaggaatc ctggttcgtc aaagaagttg aacgcggttt gcactaccga
240

ttccccgagg gcattcccga tgacgtacgc aagcaggcag attatgaagt agggattatt
300

accagatgg gattccccgg ctacttcttg gtggtcgcgg attttatcaa ctgggcgaag
360

aataacggaa ttcgagtggg ccccgggcgt
390

<210> 2302

<211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2302
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1 5 10 15
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
 20 25 30
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
 35 40 45
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
 50 55 60
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
 65 70 75 80
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
 85 90 95
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
 100 105 110
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
 115 120 125
 Gly Arg
 130

<210> 2303
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 2303
 nnggaccag gctgcccctg tgtgtctcct tcagtcttcg ttagctgcct gctgctgtct
 60
 gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggg
 120
 atcttgcctgt ggctcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
 180
 ctcttcttcc tgtcccgggg catcgagggc actggctcgg ccagctactc caccatcgcg
 240
 cccaccgtcc tgggcgacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc
 300
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg
 360
 ctgactggga actggcgctg ggccctccga gtcatgccct gcctggaggc cgtggccttg
 420
 atcttgctta tctgtctggt tccagaccca ccccggggag ctgccgagac acagggggag
 480
 ggggcccgtg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
 540
 tggagttttg tgtggctcgac cctcggagtg accgccatgg cctttgtgac tggagccctg
 600
 gggttctggg cccccaagtt tctgctcgag gcacgcgt
 638

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304

```

Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1           5           10           15
Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20           25           30
Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35           40           45
Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50           55           60
Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65           70           75           80
Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85           90           95
Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100          105          110
Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115          120          125
Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130          135          140
Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145          150          155          160
Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165          170          175
Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180          185          190
Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195          200          205
Leu Glu Ala Arg
 210

```

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305

```

gccccgcct ctatcttccg gcacggtcac agtcgcatcg tgacgggtact ggctggagtc
 60
tcggaccagc acactttgac cgtcgtggtc gcctcgtgac atggggtaac gcgaacctcg
 120
tcgtctctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
cccgcaacgc tattggtgac gcagcactcg cagctgggtct cgaccgactc gtccacacca
 240
cggcgtcggg gcgcgacgag ggcgatgagt tggtcgtcgt tactcgcagc gctgctgccg
 300
ccgcacgcaa ttccatgacg acaacgtgga gttggcgcg
 340

```

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306

```

Met Glu Leu Arg Ala Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1             5             10             15
Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
      20             25             30
Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
      35             40             45
Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
      50             55             60
Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
65             70             75             80
Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
      85             90             95
Asp Asp Ala Gly Arg
      100

```

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307

```

ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
60
gccaaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag
120
cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
180
gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
240
ccaccctgtc ctctccacgg tggctcccga ggcccttcca ctttccttcc tgagccccc
300
gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
360

```

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308

```

Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1             5             10             15
Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
      20             25             30
Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
      35             40             45
Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
      50             55             60
Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro

```

```

65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
          85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
          100          105          110
Gly Leu Pro Lys Thr Lys Glu Ala
          115          120

```

<210> 2309
 <211> 395
 <212> DNA
 <213> Homo sapiens

```

<400> 2309
ggatccctac aaatggggcc ctgctctgag cacattccca tgagggctgc ctgccctgtg
60
cactctctgc cctggggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagcccaccc gtctgtcctc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccctgg agtctcctcc cagaccagcc
300
gactccactc aactgtgtgc tagcggactg tgtggttgat gcagccggtc cacttgagtg
360
tgttgtgtta tgcccacaac aggcttgccg tcacc
395

```

..
 <210> 2310
 <211> 108
 <212> PRT
 <213> Homo sapiens

```

<400> 2310
Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
          20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
          35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
          50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
          85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
          100          105

```

<210> 2311
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2311

gtgcacgccg agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
60
ggcttctcag tgatcaaggt cggcgatggc atcaatgatt gcgacgctct cgccgcggcg
120
gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
180
gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaacctg
240
gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcgggtgtt ccttgtaacg
300
accgtcgtcg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
360
cttgtgacca tgaacgcg
378

<210> 2312

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2312

Val	His	Ala	Glu	Met	Leu	Pro	Gln	Asp	Lys	Gln	Arg	Val	Val	Gly	Glu
1				5					10					15	
Leu	Lys	Arg	Gln	Gly	Phe	Ser	Val	Ile	Lys	Val	Gly	Asp	Gly	Ile	Asn
			20					25					30		
Asp	Cys	Asp	Ala	Leu	Ala	Ala	Ala	Asp	Val	Gly	Ser	Pro	Met	Gly	Gly
		35					40					45			
Ser	Ala	Asp	Val	Ala	Leu	Glu	Thr	Ala	Asp	Ala	Ala	Val	Leu	His	Gly
	50					55					60				
Arg	Val	Gly	Asp	Val	Phe	Ala	Met	Ile	Ala	Leu	Ser	Lys	Arg	Thr	Met
65					70				75					80	
Ala	Asn	Ile	Arg	Gln	Asn	Ile	Ala	Ile	Ala	Ile	Gly	Leu	Lys	Ala	Val
				85				90						95	
Phe	Leu	Val	Thr	Thr	Val	Val	Gly	Ile	Thr	Gly	Leu	Trp	Pro	Ala	Ile
			100					105					110		
Leu	Ala	Asp	Thr	Gly	Thr	Thr	Glu	Leu	Val	Thr	Met	Asn	Ala		
		115					120					125			

<210> 2313

<211> 669

<212> DNA

<213> Homo sapiens

<400> 2313

ctagtggcat ggtctcgctg gtcttttagtg gagcataccg acacatcggg gactcaaacg
60
atccgaatca tggctcgctc tggttggcct ggaaccatta acgtacgcct caccatcgcg
120
ttaagcgacg ccgggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcgggg
180
ccgcttggat acgcagcaca cccctatctc tgtctgggtg gcaccatcga cgactggaca
240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgate ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacgggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg cccagatgca
 540
 tttaatgagg gcccgaacca cggtgacgtc attcgactgg agcccggtaa tgacgtcaca
 600
 ctgcactggg gcacgccta acccgcgga gctcgaaagg acaaggacgg gaaggcagga
 660
 ttcacgcgt
 669

<210> 2314
 <211> 206
 <212> PRT
 <213> Homo sapiens

<400> 2314
 Leu Val Ala Trp Ser Arg Trp Ser Leu Val Glu His Thr Asp Thr Ser
 1 5 10 15
 Val Thr Gln Thr Ile Arg Ile Met Ala Arg Pro Gly Trp Pro Gly Thr
 20 25 30
 Ile Asn Val Arg Leu Thr His Arg Leu Ser Asp Ala Gly Leu Ala Val
 35 40 45
 Glu Val Thr Ala Arg Asn Val Gly Thr Thr Ala Gly Pro Leu Gly Tyr
 50 55 60
 Ala Ala His Pro Tyr Leu Cys Leu Gly Gly Thr Ile Asp Asp Trp Thr
 65 70 75 80
 Val Asp Ala Pro Phe Thr Ser Trp Leu Gln Val Asp Asp Arg Leu Leu
 85 90 95
 Pro Met Gln Met Arg Glu Met Asp Ser Ile His Ala Leu Asn Gly Leu
 100 105 110
 Thr Gly Gly Gln Arg Thr Phe Asp Thr Ala Tyr Thr Val Lys Gly Gly
 115 120 125
 Arg Asn Arg Arg Ile Ala Arg Met Ala Tyr Pro Gly Leu Asn Gly Glu
 130 135 140
 Thr Ser His Glu Leu Trp Gly Asp Ala Ala Met Ser Trp Val Gln Val
 145 150 155 160
 Tyr Thr Pro Asp Asp Arg His Ser Leu Ala Ile Glu Pro Met Thr Cys
 165 170 175
 Gly Pro Asp Ala Phe Asn Glu Gly Pro Thr His Gly Asp Val Ile Arg
 180 185 190
 Leu Glu Pro Gly Asn Asp Val Thr Leu His Trp Gly Ile Ala
 195 200 205

<210> 2315
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 2315

nacgcgtccc tcacgatac cgagcccggg atgggaaaac ggggtgtatcg cgttgaggcc
 60
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgtg
 120
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
 240
 gttgaggtcg aggggtgcccc gaccgggtatt cagcaggtcg tcaggtggaa ccttttccag
 300
 attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgaggttt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ccttccgcaa
 480
 gctcgacgcc gggctaagga attgtctgaa cgaggcgccc ttttcccggtg gcgaacaatc
 540
 accggt
 546

<210> 2316

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2316

Xaa	Ala	Ser	Leu	Ile	Asp	Thr	Glu	Pro	Gly	Met	Gly	Lys	Arg	Val	Tyr
1				5					10					15	
Arg	Val	Glu	Ala	Thr	Gln	Gly	Arg	Pro	Ile	Arg	Ile	Asp	Lys	Ala	Val
			20					25					30		
Ala	Tyr	His	Thr	Ser	Arg	Gly	Val	Pro	Val	His	Glu	Leu	Phe	Asp	Arg
		35					40					45			
Val	Arg	Arg	Ser	Leu	Asp	Arg	Val	Arg	Glu	Gln	Gly	His	Asn	Val	Tyr
	50					55					60				
Tyr	Asp	Glu	Gln	Arg	Ala	Trp	Leu	Asp	Asp	Tyr	Trp	Ala	Thr	Ala	Asp
65					70					75				80	
Val	Glu	Val	Glu	Gly	Ala	Pro	Thr	Gly	Ile	Gln	Gln	Ala	Val	Arg	Trp
			85						90					95	
Asn	Leu	Phe	Gln	Ile	Ala	Gln	Ala	Ser	Ala	Arg	Ala	Asp	Gln	Leu	Gly
			100						105				110		
Ile	Pro	Ala	Lys	Gly	Val	Thr	Gly	Ser	Gly	Tyr	Glu	Gly	His	Tyr	Phe
		115					120					125			
Trp	Asp	Thr	Glu	Val	Tyr	Val	Ile	Pro	Met	Leu	Thr	Tyr	Thr	His	Pro
	130					135					140				
Arg	Ile	Ala	Glu	Asn	Ala	Leu	Arg	Phe	Arg	Val	Asn	Thr	Leu	Pro	Gln
145					150					155				160	
Ala	Arg	Arg	Arg	Ala	Lys	Glu	Leu	Ser	Glu	Arg	Gly	Ala	Leu	Phe	Pro
			165						170					175	
Trp	Arg	Thr	Ile	Thr	Gly										
			180												

<210> 2317
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 2317
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 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
 gggtcagttc gatcagcgcg gtcgttcgag cgcttcctga acgcagcccc tgctggcgca
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 gacgtcggct gagtgggcct ggtgtgagat gcaaccccg attcctgccg ggaagagcc
 300
 atccctcggg tcggtgtctc gatgtgtcag cgagctcggc gatcgcattc ccgaggacct
 360
 cgggcagttc gattggctcg gctccgatgg tgagcttccc cggtcgtgat gtcacgtcga
 420
 cctgctcacg ggtgagcgcg acgatgcgag tgagggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgcgt
 496

<210> 2318
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2318
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
 1 5 10 15
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 20 25 30
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
 35 40 45
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
 50 55 60
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
 65 70 75 80
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
 85 90 95
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
 100 105

<210> 2319
 <211> 1748
 <212> DNA
 <213> Homo sapiens

<400> 2319
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120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatggt
180
gacaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
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300
aaaatatttc tctacatga tgggcttgtg cgaatgggta cagagaagta cattccacct
360
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420
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480
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
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tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtcct gggatttgat
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720
ggaactgatc agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag
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960
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1140
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1260
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1320
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1380
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1440
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1620
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1680

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1740

caggaaaag

1748

<210> 2320

<211> 532

<212> PRT

<213> Homo sapiens

<400> 2320

Xaa	Ile	Lys	Ser	Arg	Ser	Leu	Asp	Tyr	Thr	Phe	Val	Pro	Arg	Thr	Trp
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Ile	Phe	Pro	Ala	Glu	Tyr	Thr	Gln	Phe	Gln	Asn	Tyr	Val	Lys	Glu	Leu
			20					25					30		
Lys	Lys	Lys	Arg	Lys	Gln	Lys	Thr	Phe	Ile	Val	Lys	Pro	Ala	Asn	Gly
			35				40					45			
Ala	Met	Gly	His	Gly	Ile	Ser	Leu	Ile	Arg	Asn	Gly	Asp	Lys	Leu	Pro
	50					55					60				
Ser	Gln	Asp	His	Leu	Ile	Val	Gln	Glu	Tyr	Ile	Glu	Lys	Pro	Phe	Leu
65				70						75					80
Met	Glu	Gly	Tyr	Lys	Phe	Asp	Leu	Arg	Ile	Tyr	Ile	Leu	Val	Thr	Ser
				85					90					95	
Cys	Asp	Pro	Leu	Lys	Ile	Phe	Leu	Tyr	His	Asp	Gly	Leu	Val	Arg	Met
			100					105					110		
Gly	Thr	Glu	Lys	Tyr	Ile	Pro	Pro	Asn	Glu	Ser	Asn	Leu	Thr	Gln	Leu
			115				120						125		
Tyr	Met	His	Leu	Thr	Asn	Tyr	Ser	Val	Asn	Lys	His	Asn	Glu	His	Phe
	130					135					140				
Glu	Arg	Asp	Glu	Thr	Glu	Asn	Lys	Gly	Ser	Lys	Arg	Ser	Ile	Lys	Trp
145					150					155					160
Phe	Thr	Glu	Phe	Leu	Gln	Ala	Asn	Gln	His	Asp	Val	Ala	Lys	Phe	Trp
				165					170					175	
Ser	Asp	Ile	Ser	Glu	Leu	Val	Val	Lys	Thr	Leu	Ile	Val	Ala	Glu	Pro
			180					185					190		
His	Val	Leu	His	Ala	Tyr	Arg	Met	Cys	Arg	Pro	Gly	Gln	Pro	Pro	Gly
		195					200					205			
Ser	Glu	Ser	Val	Cys	Phe	Glu	Val	Leu	Gly	Phe	Asp	Ile	Leu	Leu	Asp
	210					215					220				
Arg	Lys	Leu	Lys	Pro	Trp	Leu	Leu	Glu	Ile	Asn	Arg	Ala	Pro	Ser	Phe
225				230						235					240
Gly	Thr	Asp	Gln	Lys	Ile	Asp	Tyr	Asp	Val	Lys	Arg	Gly	Val	Leu	Leu
			245						250					255	
Asn	Ala	Leu	Lys	Leu	Leu	Asn	Ile	Arg	Thr	Ser	Asp	Lys	Arg	Arg	Asn
			260				265						270		
Leu	Ala	Lys	Gln	Lys	Ala	Glu	Ala	Gln	Arg	Arg	Leu	Tyr	Gly	Gln	Asn
			275				280					285			
Ser	Ile	Lys	Arg	Leu	Leu	Pro	Gly	Ser	Ser	Asp	Trp	Glu	Gln	Gln	Arg
	290					295					300				
His	Gln	Leu	Glu	Arg	Arg	Lys	Glu	Glu	Leu	Lys	Glu	Arg	Leu	Ala	Gln
305					310					315					320
Val	Arg	Lys	Gln	Ile	Ser	Arg	Glu	Glu	His	Glu	Asn	Arg	His	Met	Gly
			325						330					335	
Asn	Tyr	Arg	Arg	Ile	Tyr	Pro	Pro	Glu	Asp	Lys	Ala	Leu	Leu	Glu	Lys

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          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
          355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
          370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
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Leu Pro Pro Thr
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<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtccaggac accatcacag agcagtactt cccttggtgag atactctcag ctaagtaaga
240
attgagtgag acaacaataa aacaaatacc cataggcttt tcaaacagta acaacccgct
300
cagggttagc agcattttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
360
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420
cagaggtgga gtg
433

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<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

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Met Leu Leu Thr Leu Ser Gly Leu Leu Leu Phe Glu Lys Pro Met Gly
 1           5           10           15
Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
          20           25           30
Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
          35           40           45
Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
          50           55           60
Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
65           70           75           80
Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
          85           90           95
Thr His Ile Asp Thr Ser Thr Gln Leu
          100          105

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<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

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acgcgtcaaa actggcaaa ctggcggctt agggggaggg gcaagtggac ttggaggccc
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tcctccactg tgcacccccct tggaaaaaaa gcggaggggg catcaagtaa aagtttcttg
120
ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
180
ctgccgggca cagcgnctct caggagccag ccggggagag ctgagccaag gccgaaggag
240
ccgcctgcgg gcttagccgc cccctccgc ccgttgccc cagagcggac gctgggacgc
300
ccggggtctg gcagctctgc gcccggctag gagcgggagg gcgagcatta gcctgcgtcc
360
tgagagaagg gcgcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
420
ctgtcagtga gcgcccggat tgcacggccc ccgggtagtg cctgccggcg aggggcggga
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gctcgggtga cttggccatc cccatccccg gccagggccc ggagggcggc cg
532

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<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

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Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1           5           10           15
Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
          20           25           30
Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
          35           40           45
Pro Arg Thr

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50

<210> 2325
 <211> 459
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 300
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 360
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 420
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 459

<210> 2326
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2326
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 Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn
 20 25 30
 Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro
 35 40 45
 Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr
 50 55 60
 Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu
 65 70 75 80
 Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg
 85 90 95
 Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys
 100 105 110
 Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val
 115 120 125
 Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr
 130 135 140
 Leu Gly Asp Val Ala Val Val Val His
 145 150

<210> 2327
 <211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

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 240
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 420
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<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

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			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
		35					40				45				
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
	50				55						60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65				70					75						80
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120					125			
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
	130					135				140					
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145				150						155					160
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165					170				175			
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

180
Cys Phe Cys Cys Glu Ala Ala
195

185

190

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

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120
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180
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240
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300
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392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
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20 25 30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35 40 45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50 55 60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65 70 75 80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85 90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

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120

aaattttatc tattacaaag aacttttaaag ttgagaatat tggacctctt cctataactg
180
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780
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1140
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1260
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1320
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1380
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1440
aaaagagaag gaaatttaca aaatttaaag tggagtaaaa gtcgaacatg tagaaagaac
1500
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1620
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1680
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1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc
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 1920
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 1980
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 2040
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 2160
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 2220
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 2280
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 2340
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 2460
 agcgatgtgt atgaaaattg ctgccccatc aacccacca cggaacattc gaccacatg
 2520
 gaaaaccaag cggtcgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgcctat
 2580
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga
 2640
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag
 2700
 aggcttgtgt tttgattact agtgtaaact ggttattgag atagattatg acattggtgg
 2760
 atattttggc acttttatat gaaaataaat tttttaatga aaaaaaaaaa aaa
 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5					10					15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35					40				45				
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50					55				60					
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65					70				75					80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

1705

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<210> 2333
<211> 501
<212> DNA
<213> Homo sapiens
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<400> 2333
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60
gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtgca
120
gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
180
aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
240
tacattatgc atcctataca agttgcaggt attttaacag aaatgcgatt agacggaccg
300
acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
360
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gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttattttatt
 480
 gcgattgccca aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
 ggatcctgag cgtgggggact tctttgcact ccacagaacc ctcaacttgta cctctacttt
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 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatgggccc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 acccgccctgc agttggaaca ggaggctgag agcttttaggg agctggaggc ccctgcccag
 240
 ggcagcccac ccagccctgg tgaggaggcc ctggtcccta ctttcccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcatcttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
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 accatgtgca gctcaagaat ggctccggc ccatcggcct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcctt gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 ggggtcaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga
 240
 cctgcgggat cctcgctctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu


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<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
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<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
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1709

gccaaacctc ccctccatcc tgcccaagat ggatcttgct gagcctccct ggcatatgcc
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 tctgcaggag gagccagagg aggtcacgga ggaggaggag gaaaggggaag aagaggagag
 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
 240
 agtcctgggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacett gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1				5					10					15	
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
			20					25					30		
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
		35					40					45			
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50					55					60				
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70					75					80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
				85				90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

ggcccgaga agatgctgat gccttcacag tttccaacc agggccagca gggattctct
 60
 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgata agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tcctcctggg accgtgcatt cagccccaaa ccggggggcta
 240
 ggcaggcggc cttcggacct caccatcagt attaatacaga tggggtcacc gggcatgggg
 300

cacttgaagt cgcccaccct tagccagggtg cactcacccc tggtcacctc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atgggtgccct tgccttctgc caaccgcga
 420
 ggacctctca agtcgccccca ggctctcggc tcctccctca gtgtccgttc acccactggc
 480
 tcgcccagca ggctcaagtc tccttccatg gcggtgcctt ct
 522

<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser	Gln	Phe	Pro	Asn	Gln	Gly	Gln
1				5					10					15	
Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
			20					25					30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
		35					40					45			
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
	50					55					60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65					70					75					80
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
			85						90					95	
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
		100						105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
		115					120					125			
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
	130					135					140				
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145					150					155					160
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
				165					170						

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

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 60
 ggctccacc agccgcgctc caggccgctt gggctcgacg cgctggacag gcgcccggcg
 120
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctgggtg cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgtgtcc gagtccttgg cgctgtcgga cgtgagtgc
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgacaca gctcccccat ctgccggaga aaacttccga atcctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac
 480
 tccaagnntc cgacgagaag gggaaccagt ccgagaacag cgaagacccg gagcccgacc
 540
 ggaagaagtc gggcaacgcg t
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

Xaa	Ile	Ser	Val	Leu	Ile	Leu	Ser	Thr	Glu	Ala	Leu	Gly	Gly	Glu	Asp
1				5					10					15	
Ser	Ser	Arg	Gly	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu
			20					25					30		
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
		35					40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
	50					55					60				
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65					70					75				80	
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
			85					90						95	
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
			100					105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
		115					120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
		130				135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150					155					160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
			165					170						175	
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

atcagcgaag aacacggcag gaccctggaa gacgccgccg gtgaattgaa gcgtgggtatc
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 gagaacgtcg agtacgcctg cgccgcgccg gaagtactga aggggtgaata cagccgtaac
 120
 gtcgggtccga acatcgacgc ctggtccgat ttccagccgc tgggcgtggt ggcggggatc
 180

acgccattca acttcccggc gatggtgccc ctgtggatgt atccggtggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg ttgccc aaa ggtgtgctga acgtggtgca tggtgacaag
 360
 accgcggtgg acgcg
 375

<210> 2348
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 2348
 Ile Ser Glu Glu His Gly Arg Thr Leu Glu Asp Ala Ala Gly Glu Leu
 1 5 10 15
 Lys Arg Gly Ile Glu Asn Val Glu Tyr Ala Cys Ala Ala Pro Glu Val
 20 25 30
 Leu Lys Gly Glu Tyr Ser Arg Asn Val Gly Pro Asn Ile Asp Ala Trp
 35 40 45
 Ser Asp Phe Gln Pro Leu Gly Val Val Ala Gly Ile Thr Pro Phe Asn
 50 55 60
 Phe Pro Ala Met Val Pro Leu Trp Met Tyr Pro Leu Ala Ile Val Cys
 65 70 75 80
 Gly Asn Cys Phe Ile Leu Lys Pro Ser Glu Arg Asp Pro Ser Ser Thr
 85 90 95
 Leu Leu Ile Ala Gln Leu Leu Gln Glu Ala Gly Leu Pro Lys Gly Val
 100 105 110
 Leu Asn Val Val His Gly Asp Lys Thr Ala Val Asp Ala
 115 120 125

<210> 2349
 <211> 417
 <212> DNA
 <213> Homo sapiens

<400> 2349
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 gctgacaaag tttttggtgt cccaggagat ttaatactag cctttttaga tgatattatt
 120
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgtcg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaa at acgttcacca ttccttggc
 360
 gaaggaactt ttgatgatta tagaaaaatg tttagacctt ttacaacagc gcaagct
 417

<210> 2350

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2350
 Xaa Lys Lys Lys Lys Lys Lys Lys Thr Gln Tyr Leu Met Asp Ala Val
 1 5 10 15
 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
 20 25 30
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
 35 40 45
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
 50 55 60
 Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
 65 70 75 80
 Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
 85 90 95
 Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
 100 105 110
 Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
 115 120 125
 Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
 130 135

<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351
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 ggctccgccc agctgtgcca ccgttcctgg atcaccgacc agtatgaccg gttcgtgcgt
 120
 ggcaataactg tgetcgctca gccgaatgat gccggcatga ttcgtattga cgacaacctc
 180
 ggcatcgccg tgctccttga cgctaaccga cgccagacca cccttaaccc gtatcttggc
 240
 gccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg
 300
 gctgtcactg attgcctcaa ttatggctcc cgtacgac ccatgtcat gtggcaattc
 360
 gacgagacca tccttggctt gggtgacggc tgccgcgagc ttggcgtgcc gggtacgggc
 420
 ggtaacgttt ccctgcacaa ccgcactgga gatgagtcga ttcggcctac tccgctcgtt
 480
 ggtgtgctcg gcgttattga tgacgtgcat cgtcgcaccc cgtcggcctt cgcacacgac
 540
 ggcgacgctg tcttgcgtct aggaacgacg aagtgcgagt tcggcggatc ggtctatgag
 600
 gacgtcatcc acgctggcca cctaggcggg atgccccga tgcccgacct gaatgccgag
 660
 aaggccctgg ccgcggtgat ggtggaagcg tcgaag
 696

<210> 2352
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 2352
 Xaa Ala Leu Pro Arg Asp Asn Ser Gly Glu Gly Leu Ala Gly Ala Leu
 1 5 10 15
 Leu Ala Leu Val Gly Ser Ala Gln Leu Cys Asp Arg Ser Trp Ile Thr
 20 25 30
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
 35 40 45
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50 55 60
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65 70 75 80
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85 90 95
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
 100 105 110
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
 115 120 125
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
 130 135 140
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
 145 150 155 160
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
 165 170 175
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Gly Thr Thr Lys Cys
 180 185 190
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
 195 200 205
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
 210 215 220
 Ala Val Met Val Glu Ala Ser Lys
 225 230

<210> 2353
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 2353
 nnagcaatct cagaagaatt gctggctgag ttttcaaact atggtgtcaa agtagtaccg
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 atttcaggtg atgtttcaga ctttgcagat gccaaagcgta tggtagatca agcgattaca
 120
 gaactcgggt ctgttgatgt cttgggtcaac aatgctggga tcactcaaga tacgcttatg
 180
 ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc
 240
 aacatgacgc aagcagtctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac
 300

atgtctagtg tggtcgggtt gatgggaaat atcggacaag ccaactatgc agcttctaaa
 360
 gcaggcttga ttgggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc
 420
 gt
 422

<210> 2354
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 2354
 Xaa Ala Ile Ser Glu Glu Leu Leu Ala Glu Phe Ser Asn Tyr Gly Val
 1 5 10 15
 Lys Val Val Pro Ile Ser Gly Asp Val Ser Asp Phe Ala Asp Ala Lys
 20 25 30
 Arg Met Val Asp Gln Ala Ile Thr Glu Leu Gly Ser Val Asp Val Leu
 35 40 45
 Val Asn Asn Ala Gly Ile Thr Gln Asp Thr Leu Met Leu Lys Met Thr
 50 55 60
 Glu Glu Asp Phe Glu Lys Val Ile Lys Ile Asn Leu Thr Gly Ala Phe
 65 70 75 80
 Asn Met Thr Gln Ala Val Leu Lys Gln Met Ile Lys Ala Arg Glu Gly
 85 90 95
 Ala Ile Ile Asn Met Ser Ser Val Val Gly Leu Met Gly Asn Ile Gly
 100 105 110
 Gln Ala Asn Tyr Ala Ala Ser Lys Ala Gly Leu Ile Gly Phe Thr Lys
 115 120 125
 Ser Val Ala Arg Glu Val Ala Asn Arg Asn Val Arg
 130 135 140

<210> 2355
 <211> 5191
 <212> DNA
 <213> Homo sapiens

<400> 2355
 cttgccaagt ttgacgggtga agtgatctgt gaacctccca acaacaaact ggacaaattc
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 agcggaaccc tctactggaa ggaaaataag ttccctctga gcaaccagaa catgctgctg
 120
 cggggctgtg tgctgcgaaa caccgagtggt tgcttcgggc tggatcatctt tgcaggtcct
 180
 gacactaagc tgatgcaaaa cagcggcgaga acaaagttca aaagaacgag tatcgatcgc
 240
 ctaatgaata ccctgggtgct ctggattttt ggattcctgg tttgcatggg ggtgatcctg
 300
 gccattggca atgccatctg ggagcacgag gtggggatgc gtttccaggt ctacctgccg
 360
 tgggatgagg cagtggacag tgccttcttc tctggcttcc tctccttctg gtcctacatc
 420
 atcatcctca acaccgttgt gccatttca ctctatgtca gtgtggaggt catccgtctg
 480

ggccacagct acttcatcaa ctgggataag aagatgttct gcatgaagaa gcggaacgct
 540
 gcagaagccc gcaccaccac cctaaacgag gagctgggcc aggtggagta catcttctcc
 600
 gacaagacgg gcaccctcac ccagaacatc atgggttttca acaagtgtct catcaatggc
 660
 cacagctatg gtgatgtgtt tgacgtcctg ggacacaaaag ctgaattggg agagaggcct
 720
 gaacctgttg acttctcctt caatcctctg gctgacaaga agttcttatt ttgggacccc
 780 aggtgtcaa gatcggggac cccacacgc atgagttctt ccgctcctt 840
 tccctgtgtc atactgtcat gtcagaagaa aagaacgaag gagagctgta ctacaaagct
 900
 cagtccccag atgagggggc cctggtcacc gcagccagga actttggttt tgttttccgc
 960
 tctcgcaccc ccaaaacaat caccgtccat gagatgggca cagccatcac ctaccagctg
 1020
 ctggccatcc tggacttcaa caacatccgc aagcggatgt cggtcatagt gcggaatcca
 1080
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<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356
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 35 40 45
 Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
 50 55 60
 Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
 65 70 75 80
 Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
 85 90 95
 Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
 100 105 110
 Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
 115 120 125
 Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
 130 135 140
 Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
 145 150 155 160
 Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
 165 170 175
 Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
 180 185 190
 Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
 195 200 205
 Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
 210 215 220
 Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
 225 230 235 240
 Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
 245 250 255
 Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
 260 265 270
 Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
 275 280 285
 Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
 290 295 300
 Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
 305 310 315 320
 Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
 325 330 335
 Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
 340 345 350
 Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
 355 360 365
 Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
 370 375 380
 Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
 385 390 395 400
 Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
 405 410 415
 Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

420							425					430				
Ser	Arg	Glu	Asp	Arg	Leu	Ala	Ser	Ile	Tyr	Glu	Glu	Val	Glu	Asn	Asn	
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Met	Met	Leu	Leu	Gly	Ala	Thr	Ala	Ile	Glu	Asp	Lys	Leu	Gln	Gln	Gly	
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Val	Pro	Glu	Thr	Ile	Ala	Leu	Leu	Thr	Leu	Ala	Asn	Ile	Lys	Ile	Trp	
465	470							475					480			
Val	Leu	Thr	Gly	Asp	Lys	Gln	Glu	Thr	Ala	Val	Asn	Ile	Gly	Tyr	Ser	
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Cys	Lys	Met	Leu	Thr	Asp	Asp	Met	Thr	Glu	Val	Phe	Ile	Val	Thr	Gly	
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His	Thr	Val	Leu	Glu	Val	Arg	Glu	Glu	Xaa	Gln	Glu	Ser	Pro	Gly	Glu	
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Asp	Asp	Gly	Leu	Ile	Xaa	Arg	Ser	Val	Gly	Asn	Gly	Phe	Thr	Tyr	Gln	
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Asp	Lys	Leu	Ser	Ser	Ser	Lys	Leu	Thr	Ser	Val	Leu	Glu	Ala	Val	Ala	
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610							615					620				
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625	630							635					640			
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690							695					700				
Phe	Ser	Ala	Gln	Thr	Val	Tyr	Asp	Gln	Tyr	Phe	Ile	Thr	Leu	Tyr	Asn	
705	710							715					720			
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725							730					735				
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740							745					750				
Gly	Gln	Leu	Asn	Leu	Leu	Phe	Asn	Lys	Arg	Glu	Phe	Phe	Ile	Cys	Ile	
755							760					765				
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770							775					780				
Val	Phe	Ala	Asp	Ala	Thr	Arg	Asp	Asp	Gly	Thr	Gln	Leu	Ala	Asp	Tyr	
785	790							795					800			
Gln	Ser	Phe	Ala	Val	Thr	Val	Ala	Thr	Ser	Leu	Val	Ile	Val	Val	Ser	
805							810					815				
Val	Gln	Ile	Gly	Leu	Asp	Thr	Gly	Tyr	Trp	Thr	Ala	Ile	Asn	His	Phe	
820							825					830				
Phe	Ile	Trp	Gly	Ser	Leu	Ala	Val	Tyr	Phe	Ala	Ile	Leu	Phe	Ala	Met	
835							840					845				
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      850              855              860
Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
865              870              875              880
Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
      885              890              895
Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
      900              905              910
Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
      915              920              925
Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
      930              935              940
Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
945              950              955              960
Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile
      965              970              975
Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
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Gly Ala Asp Lys Pro Leu Lys Gly
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<210> 2357
 <211> 408
 <212> DNA
 <213> Homo sapiens

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<400> 2357
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120
gggtgcgcaa acggtgaaga cgaggtttcc cgcaagctca tcaccgtgtg ggggtgctgag
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gccttgttcg ccggcctggt gtattacgac gccgacggca aaaccataa tgatgtggcc
300
aatccattg acttcgatgg cgaccgcacc tacacggtga cgctgcggaa aaccagattc
360
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408

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<210> 2358
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 2358
Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
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Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
      20      25      30
Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
      35      40      45
Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

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      50              55              60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr
65              70              75              80
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala
      85              90              95
Ala Ala

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<210> 2359
 <211> 324
 <212> DNA
 <213> Homo sapiens

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<400> 2359
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120
accaatcacg aagggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
180
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300
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324

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<210> 2360
 <211> 108
 <212> PRT
 <213> Homo sapiens

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<400> 2360
Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu
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Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu
      20      25      30
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile
      35      40      45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn
      50      55      60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile
65      70      75      80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg
      85      90      95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg
      100      105

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<210> 2361
 <211> 398
 <212> DNA
 <213> Homo sapiens

<400> 2361

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gatcaacaca gaccagctgg tcaaggggga cctccatccc tgccctgtcc tcacggagct
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240
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398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met	Pro	Leu	Pro	Ser	Arg	Ser	Thr	Gln	Thr	Ser	Trp	Ser	Arg	Gly	Thr
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Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
		20						25					30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
		35				40						45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55					60				
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70				75					80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
				85					90					95	

Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

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360

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 720
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 780
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 833

<210> 2364

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2364

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Lys	His	His	Gln	Gln	His	Lys	Gly	Arg	Ser	Gln	Glu	Pro	Glu	Leu	Thr
			20				25					30			
Ser	Leu	Pro	Pro	Ser	Ser	Glu	Val	Ser	Phe	Pro	Thr	Phe	Ser	Glu	Leu
	35					40					45				
Ser	Val	Ser	Met	Ala	Ser	Ser	Ala	Thr	Ser	Ala	Thr	Ser	Pro	Asp	Val
	50					55				60					
Leu	Ala	Ser	Val	Ser	Ile	Ala	Ser	Ser	Trp	Arg	Ser	Ser	Ala	Arg	Cys
65					70				75				80		
Ser	Lys	Pro	Thr	Ala	Xaa	Arg	Ser	Lys	Arg	Asp	Cys	Val	Thr	Thr	Gln
			85					90					95		
Lys	Val	Ala	Gln	Gly	Leu	Ala	Ala	Val	Pro	Ser	Gly	Ser	Leu	Cys	Ala
			100					105					110		
Gln	Pro	Pro	Ser	Ala	Gly	Phe	Pro	Gly	Pro	Cys	Cys	Gly	Ala	Arg	Ser
		115					120					125			
Pro	Asp	Glu	Arg	Ser	Arg	Ser									
	130					135									

<210> 2365

<211> 429

<212> DNA

<213> Homo sapiens

<400> 2365

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<210> 2366
<211> 132
<212> PRT
<213> Homo sapiens
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<210> 2367
<211> 474
<212> DNA
<213> Homo sapiens
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1726

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 420
 gcgacggcag cttcgtcgac atggacatgc tcgtcgtcgg tgtcggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
 1 5 10 15
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
 ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca
 60
 aaggggagcg ccctgggacc taaccagag ccccatctca ccttcccccg ttctttcaaa
 120
 gtgcctcccc caaccccagt caggacttcg tccatcccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actcccactg cctcccagct
 240
 tccacatccg ccccgctcc caggtctacc cagacagggc ccccgagcnc agactgcct
 300
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtecca gtcccaagca
 360
 gatgaacgag ctgggactcc gcctccagcc cctcccctgc cccctcct
 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370

```

Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1           5           10           15
Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
          20           25           30
Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
          35           40           45
Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
          50           55           60
Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
65           70           75           80
Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
          85           90           95
Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
          100          105          110
Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
          115          120          125
Pro Ala Pro Pro Leu Pro Pro Pro
          130          135

```

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371

```

gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcggtg
60
agaggggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
120
ggcagggcact agtcatgagg caagagatgc ctcagaagag gatgctggcc gcaggggcaca
180
gcagagagggg agatagccccg gggcactcct caggaccggg cctcagggga cagcaaacia
240
gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
300
caggcggggcc aagggttttca tgcagcn
327

```

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372

```

Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1           5           10           15
Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
          20           25           30
Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

```

          35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
          50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
65          70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
          85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
          100

```

<210> 2373

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2373

```

gaattctgac attcaggaag tcaattgcag aagggttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatggt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

```

<210> 2374

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2374

```

Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1          5          10          15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
          20          25          30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
          35          40          45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
          50          55          60
Asn Glu Asn Met Leu Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65          70          75          80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

```

<400> 2376
Xaa Ala Met Ser Leu Leu Ser Ser Gly Thr Leu Asp Ser Tyr Leu Glu
 1          5          10          15
Arg His Lys Gln Leu Asp Ala Met Arg Met Leu His Phe Phe Ala Leu
          20          25          30
Asp Glu Glu Asn Pro Ala Ser Ile Tyr Asn Cys Leu Arg Ala Ala Arg
          35          40          45
Gly Asn Ala His Ala Val Arg Gly Arg Ile Thr Ala Asp Met Trp Glu
          50          55          60
Asn Leu Asn Ala Thr Trp Leu Glu Met Arg Ser Ile Ala Ala Gly Gly
65          70          75          80
Leu Ala Arg His Gly Ile Ser His Phe Cys Asp Trp Val Lys Gln Arg

```

				85						90					95				
Ser	His	Leu	Phe	Arg	Gly	Ala	Thr	Ser	Gly	Thr	Ile	Met	Arg	Asn	Asp				
			100					105						110					
Ala	Tyr	Arg	Phe	Ile	Arg	Leu	Gly	Thr	Phe	Val	Glu	Arg	Ala	Asp	Asn				
		115					120						125						
Thr	Leu	Arg	Leu	Leu	Asp	Ala	Arg	Tyr	Glu	Met	Phe	Gly	Glu	Glu	Ser				
	130					135						140							
Glu	Glu	Val	Ser	Asp	Leu	Ser	Ala	Arg	Gly	Tyr	Tyr	Gln	Trp	Ser	Ala				
145					150					155					160				
Leu	Leu	Arg	Ala	Leu	Ser	Ser	Phe	Glu	Ala	Tyr	Thr	Glu	Leu	Tyr	Pro				
				165					170						175				
Asn	Ala																		

<210> 2377

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2377

acgcgtgaag gggtgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccagg agatgaaagg aaccaatcct ggggtggtcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatag ttcctatcta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcctaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

<210> 2378

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2378

Met	Ser	Phe	Ile	Met	Pro	Leu	Lys	Ser	Phe	Arg	Ala	Lys	Asn	Ile	Ile				
1				5				10					15						
Phe	Thr	Phe	Gln	Phe	Tyr	Val	Cys	Gln	Ser	Ile	Leu	Phe	Tyr	Ala	Phe				
		20					25				30								
Ser	Cys	Ile	His	Ile	Phe	Lys	Asn	Ile	Ser	Pro	Asn	Arg	Lys	Ile	Pro				

```

      35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
      50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
      65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
      85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
      100              105

```

<210> 2379
 <211> 342
 <212> DNA
 <213> Homo sapiens

```

<400> 2379
tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaacataa cattcacgct tgtgaaccga gacgccatac cccagcggtg ccgagagcaa
180
cagtgtgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgtcac
240
cctgcccact gggcagctgc tcgccactcc cctcctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaag ca
342

```

<210> 2380
 <211> 113
 <212> PRT
 <213> Homo sapiens

```

<400> 2380
Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
1      5      10      15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
20     25     30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
35     40     45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
50     55     60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65     70     75     80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
85     90     95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
100    105    110
Ser

```

<210> 2381
 <211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

```

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtgacgt ggaaccgatc
60
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
120
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtggcat
180
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gacgggggca
240
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat ccccaggcca
300
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
360
ccggagctga ccgcctcgtg aagaggctgt caggctcatgt acccatcgct gtggtgtcga
420
attccccgac gcgt
434

```

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

```

Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp
1          5          10          15
Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser
20          25          30
Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val
35          40          45
Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His
50          55          60
Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu
65          70          75          80
Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg
85          90          95
Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn
100         105         110
Ser Pro Thr Arg
115

```

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

```

acgcgtgcgt tcagatgagc gccggacgaa actcctcggg cgcttcggca ggcattggatt
60
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
120

```

cagaaaacgc ccactctccc ttccccaggc gccggcgctc gagtcgtcta cgcaacgcac
180
gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
240
gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctctg
300
ctttcttgat gccacccacc ttgttacata ttctgccatg caaacacct tgtgattttt
360
ggcggagtg c aacatgggtat gtgtatgcc a ctg
393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1				5					10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
		35				40					45				
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
	50				55					60					
Asp	Val	Arg	Cys	Val	Asp	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu
65				70					75					80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
			85					90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100					105					110		
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
		115					120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggttat
60
gcactgtgct gtggactctt gttgtggggc cctaggtctg ccagcattt tggggttcac
120
cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctggggc
180
cccctcacct cagagagcct gcttcctatg actgctggg ccagctggag aaggacgacc
240
caagaccct caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcttggggcc
300
caagggcctt tacgcactac tctctggggc ccactgtctg cactctt
347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttcaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc gcgcctgctg ctcccaccac gcggcaccga cccgggcgcg ccccgggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacacct ccttgccct ctgctgggga
 240
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 ggggtgtgag tgcctgtgtg ggggtagggg cagggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgcccgatatt tgagtgttta caggaatgtg ggtggtgagt acccgatatg
 540
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```

Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
          20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
          35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
    50           55

```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```

ntcaccctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
taccggggcc acgccaagcg cgtcatgttg ggtgtctggt cgtttttgcg acagttcatg
120
tataccaagt tcgttatcgt caccgacgac gatatacaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgaca cggtgatgat cgataacacg
240
ccgatcgact acctcgactt cgctcgcggt gtgtccggcc tgggttcgaa gatggggctc
300
gatcccacgc acaaattggc cggccacacc acccgn
336

```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```

Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
          20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
          35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
          50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
          65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
          85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
          100           105           110

```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag ccgccaccct acgttttagtc gcgaagcgtg tcggctccat
 60
 gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcaa
 120
 aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccag ggcttcact
 180
 gcgtcaacga agacctgagt ttcgaagacg ccctgctcta caccgccagc ctgctcgaca
 240
 gtgcctctgc cacggcgctg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
 300
 tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
 360
 agtgccctgac cgcaccaaag ccctgcct
 388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
			35				40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
			50			55					60				
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65					70					75				80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
			85					90						95	
Thr	Ala	Pro	Lys	Pro	Cys										
				100											

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
 60
 atggtcaccg accccatcac tgcgcgcccg gatatgacca tcggggaagt agacgcgctg
 120
 tgcgcccgt tccgcctctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
 180
 atttgcacca cccgcgatat gcgcttcgag cctgactttg accgcaaggt cagcgaggtc
 240

atgacggcta tgccgcttgt tgttgcgcgcg gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgctcg atgcggataa taagctcacc
 360
 ggccctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5					10					15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
	50					55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70				75					80	
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
			85					90					95		
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
		100						105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
	115					120						125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
	130					135									

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagcttttcag aggagtttgc taaagtgtta aggatttgca tatttttcaac tttagtcata
 60
 tctaagtgcc ccaataaaac agcgcgggcg attggggggt ggcttttcac aacaactaac
 120
 ttagcaatat taatctgacc ttttcctggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat tttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgctcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2396
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1 5 10 15
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
 20 25 30
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
 35 40 45
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
 50 55 60
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
 65 70 75 80
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
 85 90 95
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
 100 105 110
 Asn Ser Ser Glu Ser
 115

<210> 2397
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 2397
 nacagcacac tccgcctcct ccgacgatca tagctttcac gtcggacatg atcccccgcc
 60
 tagtgtacta ctgggtccttc tccgtccctc cctacgggga ccacacttcc tacaccatgg
 120
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
 180
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggtatcgt gatttccgat
 240
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
 300
 ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt
 360
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
 420
 taaccctaaaa gctttctcat gagaatcac
 449

<210> 2398
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 2398
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1 5 10 15
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

      20      25      30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
      35      40      45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
      50      55      60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
      65      70      75

```

<210> 2399
 <211> 344
 <212> DNA
 <213> Homo sapiens

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<400> 2399
acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttgatatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaaccc tttgctggtc cggccaggct tggagggggt cgaaaaccta caacgccaca
240
aaacggttcc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc
344

```

<210> 2400
 <211> 112
 <212> PRT
 <213> Homo sapiens

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<400> 2400
Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
1      5      10      15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
20      25      30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
35      40      45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
50      55      60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65      70      75      80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
85      90      95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
100      105      110

```

<210> 2401
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc
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 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gactttgagt ttctctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggtggt ggtcattttt caccaacctc
 300
 gtggacaagt acggcgagcgt cccggccgag gtcattgctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgaga tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgcgg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50				55						60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65				70					75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90						95	
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
	115					120					125				
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150					155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaagc gcgataaccc gctggactcg tctgcggttc acccggaagc ctaccgctg
 60
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgccgcg
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggcgtggtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcacaggac
 360
 ggtttggtgc acatctctgc acttttcg
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10					15		
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
		20						25				30			
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35				40						45			
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50				55					60					
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70					75					80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
			100					105					110		
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115					120					125			
Ser															

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
 60
 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt
 120
 ctcaactccac atttcaactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ccttcatctc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggtcacca ccaccaccc caatgcccag accgcagacc
 300
 tgcattcctc ccattctaca gccccaaatc caaacggtta ttcattctac ctcccatcct
 360

actcctcacg aatttcttcc accgtagact ctgggttaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtcctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgcgtgcac tccccctgca ggtgctgggg acaccgcaac cctcctctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgctagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata caggggagcaa ggaagcttga gccccttcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1			5					10					15		
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
		20					25					30			
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
	35					40					45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55				60					
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70				75					80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85					90					95		
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
		100					105					110			
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
	115					120					125				
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggg ttatcttcag catgggtgatc gcgattgggt tagccgttat ggctgcggtc
 60

gtattcatcg agcaaggcca gcgacgtatc ccggtgcagt acgccaagcg gatggtgggg
 120
 cgccgaatgt ttggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atcccgggtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggt cactacttca cgcgcggtga ccatccgggtg
 300
 tac
 303

<210> 2408
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2408
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
 1 5 10 15
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2409
 ccatggtttc aagcccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
 60
 cctccccggc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggcccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
           20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
           35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
           50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
           85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
           100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgcccctggg gctcattcta
60
gggtctgctg cagacagga gacagagga gctgtgagag ccctgaggct gagggtctt
120
ctggggaagc accatcccta gggacctccg cggtcggtca gtggccgctg ctgtcggtgt
180
gcagagcaga ggctggggcg agagtgggtc gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtg catgcacgtc gctgaaaggc
300
aggcctgggc ccgaggcctg ggtgtgggga cgcctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
           20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
           35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
           50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

65		70		75		80									
Gly	Gly	Trp	Arg	Leu	Ala	Cys	Gly	Trp	Gln	Glu	Gly	Gly	Met	His	Val
				85					90					95	
Ala	Glu	Arg	Gln	Ala	Trp	Ala	Arg	Gly	Leu	Gly	Val	Gly	Thr	Pro	Glu
			100					105					110		
Glu	Thr	Val	Gln	Cys	Gly	Val	Gly	Gly	Ala	Ala					
		115					120								

<210> 2413

<211> 784

<212> DNA

<213> Homo sapiens

<400> 2413

```

cccgggagag ttgggcgggg caggggtgtt catggcatatc tcgggattgt gtcatttggg
60
gtggctggat ttagggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg ggttcttctt gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacagg
240
ggctgagggtg agctcttccc atggagtgc tcttctctga tcagcctgag gagagcagg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggcctggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacaggctc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctggggggac ctgagagtaa gttacagact tcatgaccct tcaccccaaa
660
acacttgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

<210> 2414

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2414

Met	Lys	Ser	Val	Thr	Tyr	Ser	Gln	Val	Pro	Arg	Gly	Arg	Gly	Glu	Asn
1				5					10				15		
Pro	Ala	Cys	Ser	Asn	Ser	Ser	Gln	Asp	Leu	Ile	His	Arg	Phe	Arg	Gly
		20					25					30			
Thr	Cys	Gly	Leu	Trp	Val	His	Ser	Pro	Gln	Trp	Gln	Asn	Leu	Gln	Ser

```

      35              40              45
His Ile Cys Trp Ala Glu Pro Ala Trp His Glu Gln Gly Phe Ser Leu
      50              55              60
Leu Trp Pro Pro Leu Phe Asn Thr Val Leu Leu Ser Lys Asn Trp Leu
      65              70              75              80
Gly Gly Ala Gly Pro Pro Cys Asn Leu Gln Ala Cys His Leu Val Val
      85              90              95
Ser Phe Cys Ser Ala Ala Ser Gln Gly Phe Ser Ala Pro Gly Ala Gly
      100              105              110
Trp Trp Gly Pro Ala Leu Leu Arg Leu Ile Arg Lys Asp Ala Leu His
      115              120              125
Gly Lys Ser Ser Pro Gln Pro Pro Val
      130              135

```

<210> 2415

<211> 2164

<212> DNA

<213> Homo sapiens

<400> 2415

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ctcgtgccag cgtcctcgcg ggtctgaatg gaaggggtcga ggtcgtcgtc ggcggcgagc
60
agatcctgaa gccagaactc caccocggcg cccgcgccat gcggcgggag aggtgcgggc
120
ccccccaccc gcgtcgccgc catggagggtg ctgcggcgct cttcgggtctt cgctgcgggag
180
atcatggacg cttttgatcg ctggcccaca gacaaggagc tgggtggccca ggctaaagca
240
ctaggccggg agtacgtgca cgcgcgggctt ttgcgcgcgc gcctctcctg gagcgctcca
300
gagcgtgcct cgctgcccc tggaggacgc ctggctgagg tgtgcgcggt gctgctgcgc
360
ctgggcgatg agctggagat gatccggccc agcgtctacc gcaacgtggc gcgtcagctg
420
cacatctccc tgcagtctga gcctgtggtg accgatgcgt tcctggccgt ggctggccac
480
atcttctctg caggcatcac gtgggggcaag gtggtgtccc tgtatgcggt ggccgcgggg
540
ctggccgtgg actgtgtgag gcaggcccag cctgccatgg tccacgcctt cgtggactgc
600
ctgggggagt tcgtgcgcaa gaccctggca acctggctgc ggagacgcgg cggatggact
660
gatgtcctca agtgtgtggt cagcacagac cctggcctcc gctccactg gctggtggct
720
gcactctgca gcttcggcgc cttcctgaag gctgccttct tcgtgctgct gccagagaga
780
tgagctgccc acctggcagt ggccgcagcc tggccctctg ggcccaacgc aggaggcctt
840
cagcaccgga acacatcttc ctctcccca cccgagcctg gagcactcta acctcggaga
900
ccccctaagc cccgttcttc cgcagaccca ggccctccgg aagggtgagt ggggaggggc
960
tttctgagc ctggagctgg gctttggggc agcctgcgac cctccccgct tgtgtccctt
1020

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ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tgggtgaaggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca cctgctctca
 1320
 cctgagcccc aggtgaaggg gcccggaac acctctcacc tgaacccggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aaggttcaca tgctgggtgc ttaatccgtt tctggaggaa gagtatgaca cccacttggtg
 1560
 atggggctct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacc
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtggaggg tgagggtgac cccatctgct atttttgtgc tcatcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcagatgcc tgggaagccc agccccctcag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcattct
 1860
 tcctggagcc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccaccc acctgagccc
 1980
 tcccggccag gcttcgtgct ggggtgggccc atgtgccagg acaggagggg cccggcgga
 2040
 agccagcccc ggactcatcg tgacattgag atcccactgg agggtagggg tggtaataaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416
 <211> 213
 <212> PRT
 <213> Homo sapiens

<400> 2416
 Met Glu Val Leu Arg Arg Ser Ser Val Phe Ala Ala Glu Ile Met Asp
 1 5 10 15
 Ala Phe Asp Arg Trp Pro Thr Asp Lys Glu Leu Val Ala Gln Ala Lys
 20 25 30
 Ala Leu Gly Arg Glu Tyr Val His Ala Arg Leu Leu Arg Ala Gly Leu
 35 40 45
 Ser Trp Ser Ala Pro Glu Arg Ala Ser Pro Ala Pro Gly Gly Arg Leu

50	55	60
Ala Glu Val Cys	Ala Val Leu Leu Arg Leu Gly Asp	Glu Leu Glu Met
65	70	75
Ile Arg Pro Ser	Val Tyr Arg Asn Val Ala Arg Gln	Leu His Ile Ser
85	90	95
Leu Gln Ser Glu	Pro Val Val Thr Asp Ala Phe Leu	Ala Val Ala Gly
100	105	110
His Ile Phe Ser	Ala Gly Ile Thr Trp Gly Lys Val	Val Ser Leu Tyr
115	120	125
Ala Val Ala Ala	Gly Leu Ala Val Asp Cys Val Arg	Gln Ala Gln Pro
130	135	140
Ala Met Val His	Ala Leu Val Asp Cys Leu Gly Glu	Phe Val Arg Lys
145	150	155
Thr Leu Ala Thr	Trp Leu Arg Arg Arg Gly Gly Trp	Thr Asp Val Leu
165	170	175
Lys Cys Val Val	Ser Thr Asp Pro Gly Leu Arg Ser	His Trp Leu Val
180	185	190
Ala Ala Leu Cys	Ser Phe Gly Arg Phe Leu Lys Ala	Ala Phe Phe Val
195	200	205
Leu Leu Pro Glu	Arg	
210		

<210> 2417
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 2417
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 120
 cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
 180
 acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa
 240
 ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
 300
 gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgagggagaa
 360
 aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
 420
 actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg
 480
 aatgatatgt ttgggctagg ttctttggaa cgaagttggc agaaaaattc aaatttgctt
 540
 gctggcgcag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
 600
 tattattggt ttcat
 615

<210> 2418
 <211> 101
 <212> PRT

<213> Homo sapiens

<400> 2418

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Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

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<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

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aaattttcag aagtcctggt gttgcgcggt caaacagggg ccgaggaggg acgaccgcct
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ccccgtgacg ctgcttcttc ttctgcctg cagctgaggg gtctgttttg tgtcgtttcc
120
gtccttctct cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

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<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

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Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

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85 90 95

Lys Ile

<210> 2421
 <211> 420
 <212> DNA
 <213> Homo sapiens

<400> 2421
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 120
 ctgtcgcaag tctgagtagg gattatcatg acggatacaa cttcagcccc gcgttacgcg
 180
 ctgcgtgggc tacagcttat tggctggcgt gacatgcaac acgcgctgga tttcctgttc
 240
 gcggacgggc agatgaaatc gggcacgctg gtggccatca acgcagaaaa gatgctggcg
 300
 gttgaagata atgcggaagt gaaaagcctg attgaagccg cggagtttaa ataccggcc
 360
 ggtattagcg tagtgcgttc aattcgtaaa aagttccccc acgctggagt gtgctcgcg
 420

<210> 2422
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 2422
 Met Thr Asp Thr Thr Ser Ala Pro Arg Tyr Ala Leu Arg Gly Leu Gln
 1 5 10 15
 Leu Ile Gly Trp Arg Asp Met Gln His Ala Leu Asp Phe Leu Phe Ala
 20 25 30
 Asp Gly Gln Met Lys Ser Gly Thr Leu Val Ala Ile Asn Ala Glu Lys
 35 40 45
 Met Leu Ala Val Glu Asp Asn Ala Glu Val Lys Ser Leu Ile Glu Ala
 50 55 60
 Ala Glu Phe Lys Tyr Pro Ala Gly Ile Ser Val Val Arg Ser Ile Arg
 65 70 75 80
 Lys Lys Phe Pro His Ala Gly Val Cys Ser Arg
 85 90

<210> 2423
 <211> 371
 <212> DNA
 <213> Homo sapiens

<400> 2423
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 gagctcaacg ccaagcacia gaagarattg gaaggtcttc tacggcatcc tgagaataga
 120

gaatgcgcag actgcaagtc aaagggctct cgatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgttcttg cattcataga agcctggggg tgcacatatc taaggtaaga
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaatc aatgggaaac
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 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttggaata
 360
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 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
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Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
		20						25					30		
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35					40					45			
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50					55				60					
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70					75					80	
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85					90					95		
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
		100						105					110		

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

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 120
 acctccccgc ctgcacgggg gtteggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgacgt cagcgccgcg ccgcgtccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgccctgac cgggggcgag ccgctgctga tgcgtcgctt gatcgacgag
 360
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctcg gactgcccac c
 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
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 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
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 tggagcgtaa aatggtgcag agcccagcta gaagccagga ggagcagaca ccctgctgat
 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatacctt aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55 60
 Asn Val Pro Leu Ser Gly Lys Val
 65 70

<210> 2429
 <211> 428
 <212> DNA
 <213> Homo sapiens

<400> 2429
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 120
 gatgtcctgc tcaatggggt agagacgtcg accgggtccgc agccgggtgc gcttgctttg
 180
 ctggaacagg ccgtacatga gctggatggc actggggatg ctgatcctcg cgccgctgag
 240
 ttggctgagc gcgcccgcga gatgtcgtat gacctcactg acctcgtgc ttcggteget
 300
 ggccatgcgg ctcgggctga agctgatccg caacggcttg aggaattggg gggtcgtttg
 360
 gcggctattc agcggctggt gagggcgcg accaccacc tcgacgatct cctcgactcc
 420
 actgcggc
 428

<210> 2430
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2430
 Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu
 1 5 10 15
 Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
 20 25 30
 Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35 40 45
 Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50 55 60
 Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65 70 75 80
 Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85 90 95
 Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100 105 110
 Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
 115 120 125
 Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130 135 140

<210> 2431
 <211> 409

<212> DNA
<213> Homo sapiens

<400> 2431
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atagtcgggt aaatagggat tttcatgggt caatttatta ttcaagggtg ctgccagtta
120
aatggcgagg taacaatttc tggggcaaaa aatgccgcat taccaatcct atttgctact
180
ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
240
actatcgagt tgtaaaaaga gctgggtgct actgctactc agactcaaca ctgcgtgcat
300
attaatgcca aagaagttaa gaactatact gcttcttatg aattagtgag aagtatgcgt
360
gcttcaattt tggcattagg tccattgggt gctcgggttc gtgaagctt
409

<210> 2432
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2432
Met Gly Gln Phe Ile Ile Gln Gly Gly Cys Gln Leu Asn Gly Glu Val
1 5 10 15
Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
20 25 30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
35 40 45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
50 55 60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
65 70 75 80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
85 90 95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
100 105

<210> 2433
<211> 655
<212> DNA
<213> Homo sapiens

<400> 2433
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aggctacacc acacagccga ggcgtgtgga ggactatacc atctgggttt acgtaagtgc
120
gctctatgat gctcacgtaa caatgaaatc acggaatctc tctctcagaa catttccccg
180
ttgtgaagca gcacgtgact ataatctttt cccaggttta cccctgaagt tcaagtgcaa
240

tgccctgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
 300
 cgggccagcc gggcgggcag tgggggttgg ggggaggggt gacccattgg tgctgccacg
 360
 accaaagaga caggatcttg gagagagtga ggcctctgtg caggggacga tgaaggccca
 420
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 480
 tgtgactgcc gtgttccaaa cacacccttt gcttttataa aaacccaaac tgggaggttt
 540
 agcaaaaggc acagtttcag agcataataa agacagagca gaatgggaga ggagggttaat
 600
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 655

<210> 2434

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2434

Met	Ala	His	Leu	Ile	Asn	Leu	Leu	Ser	His	Ser	Ala	Leu	Ser	Leu	Leu
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Cys	Ser	Glu	Thr	Val	Pro	Phe	Ala	Lys	Pro	Pro	Ser	Leu	Gly	Phe	Cys
		20						25					30		
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
		35				40						45			
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50				55					60					
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65				70						75				80	
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85					90						95	
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100				105						110			
Leu	Leu	Ser	Ser	Pro	Ala	Leu	Cys	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn
	115					120						125			
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 120
 gcagatattg accaagcggc ccaggggtgcg atgggcgcca agatgcgcaa tatcggcgag
 180
 gcctgcaccg cagctaaccg cttcttggtc cagcagtcctg ttgctgagga gttctctgag
 240

aaactcgttg cggagtttga gaagctcaat ctgggcaatg gatatggacga aggtattacc
 300
 tgcggacctc tcgtcgagtc caaggctttg gagagcattg cggcattggt ggacgatgct
 360
 gcagaaaagg gcgctaccat ctccaccggc ggtaagcgcg c
 401

<210> 2436

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2436

Lys	Leu	Ser	Phe	Thr	Gly	Ser	Thr	Pro	Val	Gly	Arg	Thr	Leu	Leu	Lys
1				5					10					15	
Xaa	Ala	Ala	Asp	Asn	Val	Leu	Arg	Thr	Ser	Met	Glu	Leu	Gly	Xaa	Asn
			20					25					30		
Ala	Pro	Phe	Ile	Val	Phe	Glu	Asp	Ala	Asp	Ile	Asp	Gln	Ala	Val	Gln
		35					40					45			
Gly	Ala	Met	Gly	Ala	Lys	Met	Arg	Asn	Ile	Gly	Glu	Ala	Cys	Thr	Ala
	50					55					60				
Ala	Asn	Arg	Phe	Leu	Val	His	Glu	Ser	Val	Ala	Glu	Glu	Phe	Ser	Glu
65					70					75				80	
Lys	Leu	Val	Ala	Glu	Phe	Glu	Lys	Leu	Asn	Leu	Gly	Asn	Gly	Met	Asp
			85						90					95	
Glu	Gly	Ile	Thr	Cys	Gly	Pro	Leu	Val	Glu	Ser	Lys	Ala	Leu	Glu	Ser
			100					105					110		
Ile	Ala	Ala	Leu	Val	Asp	Asp	Ala	Ala	Glu	Lys	Gly	Ala	Thr	Ile	Ser
		115					120						125		
Thr	Gly	Gly	Lys	Arg											
	130														

<210> 2437

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2437

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 120
 atggtatgta tttttcaagc tagacgttca taatggtaga acatgaggag gaaaactgcc
 180
 tcttaaatacc caccacttac tgtgacacag tgaccggtcc ctgcagcgga ctggatagtt
 240
 gatatcagagt cctggacgga aacagatggc actcaaaagg tggcgcgag ttcagagaaa
 300
 tgccatatgta cggatttggt ccaatgcctc agcctgacct cagggacctt cgggggtctg
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 420
 agttccagtc atttcatttt atcgctgtg
 449

<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
 Met Val Glu His Glu Glu Glu Asn Cys Leu Leu Asn Pro Thr Thr Tyr
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 Cys Asp Thr Val Thr Gly Pro Cys Ser Gly Leu Asp Ser Cys Ile Arg
 20 25 30
 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala' Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
 Thr His Phe His Pro Ser Ala Thr Phe Lys Phe Gln Ser Phe His Phe
 85 90 95
 Ile Ala Val

<210> 2439
 <211> 4425
 <212> DNA
 <213> Homo sapiens

<400> 2439
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 120
 atgtatctgt cttccacgga gccgccagcc gctgctgaat gggcatgtct gctgcccct
 180
 ctgaggggccc gtgagccaga gggcgtctgg aacctgctaa gcattgtgcg ggagatgttc
 240
 aagcggaggg acagcaatgc tgcccccttg ttggaaatcc tactgacca gtgcctcacc
 300
 tatgaacaga taacagggtg gtggtatagc gtacgtacct cagcctcaca cagcagtgcc
 360
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 420
 atgtgtgacg agatgggtcac actgtggagg ctggccgtgc tggaccctgc actcagcccc
 480
 cagcggcgcc gggaactgtg tacgcagctg cggcagtggc aactgaaggt gattgagaac
 540
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 660
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 720
 tcccgtctg ggggcctgga ggaatcccgg gaccggcccc gacccttcc tactgagcca
 780

gctgtgcggc ccaaggagcc tgggaccaag cgaaagggct tgggtgaggg ggtccccctca
840
tcacagcggg gtccccgccg cctctcagct gaagggggag ataaagctct acataagatg
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960
gcaggtggcg gaagcaagcg acggctgagc agcgaagaca gctccctgga gccagacctg
1020
gccgagatga gcctggatga cagcagcctg gccctgggag cagaggccag caccttcggg
1080
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1200
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1260
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1320
gccctgcag ttggagagga ggatgatgac taccaggcgt actatctgaa tgcccaggat
1380
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1440
gctgggctga agccactgga acaggagagt cgcattggagg tactgtttgc ctgtgctgag
1500
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1560
gatctgctag ccaaccacc cgacctcaag ggcaagaaga acaaggatat cagagccgt
1620
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1680
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1740
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1860
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1920
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1980
ccaagtcgca actggaacag cgagacacct ggggatgagg agcttggatt tgaagcagca
2040
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<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
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Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
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Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
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Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Leu	Glu	Ile	Leu	Thr	Asp
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Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
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Gly	Gln	Ser	Glu	Val	Ala	Ala	His	Ala	Cys	Ala	Ser	Met	Cys	Asp	Glu
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Met	Val	Thr	Leu	Trp	Arg	Leu	Ala	Val	Leu	Asp	Pro	Ala	Leu	Ser	Pro
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Gln	Arg	Arg	Arg	Glu	Leu	Cys	Thr	Gln	Leu	Arg	Gln	Trp	Gln	Leu	Lys
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Val	Ile	Glu	Asn	Val	Lys	Arg	Gly	Gln	His	Lys	Lys	Thr	Leu	Glu	Arg
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Leu	Phe	Pro	Gly	Phe	Arg	Pro	Ala	Val	Glu	Ala	Cys	Tyr	Phe	Asn	Trp
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Lys	Leu	Ala	Leu	Cys	Trp	Ala	Arg	Ala	Leu	Pro	Ser	Arg	Pro	Gly	Ala
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Ser	Arg	Ser	Gly	Gly	Leu	Glu	Glu	Ser	Arg	Asp	Arg	Pro	Arg	Pro	Leu
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 675 680 685
 Thr Val Ser Glu Ala Glu His Pro Leu Leu Cys Glu Gly Thr Arg Arg

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Gln Thr His Lys Pro Gln Thr Leu Ser Ser Phe Tyr Ser Ser Ser Arg				
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Leu Pro Ser Glu Ala Ala Leu Thr Pro Arg Pro Glu Gly Lys Val Pro				
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Ser Arg Leu Ala Leu Gly Ser Arg Gly Gly Tyr Asn Gly Arg Gly Trp				
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Tyr Phe Glu Leu Ala Lys Thr Val Leu Ile Lys Ala Gly Gly Asn Ser				
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 1155 1160 1165
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 1170 1175 1180
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 1250 1255 1260
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 <211> 2244
 <212> DNA
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<211> 168
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
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 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
 65 70 75 80
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 85 90 95
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
 100 105 110
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
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 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
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<210> 2443
 <211> 361
 <212> DNA
 <213> Homo sapiens

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<210> 2444
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 <212> PRT
 <213> Homo sapiens

<400> 2444

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Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
          35           40           45
Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
          50           55           60
Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
65           70           75           80
Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
          85           90           95
Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
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Leu Pro Gly Gly Phe Asp Glu Ala
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<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

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<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

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          20           25           30
Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
          35           40           45
Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
          50           55           60
Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

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<210> 2447
 <211> 744
 <212> DNA
 <213> Homo sapiens

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 <211> 248
 <212> PRT
 <213> Homo sapiens

<400> 2448
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 35 40 45
 Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
 50 55 60
 Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

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Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100          105          110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115          120          125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130          135          140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
      145          150          155          160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165          170          175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180          185          190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195          200          205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210          215          220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
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Ser His Asp Glu Val Arg Val Met
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<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

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gtgcacttttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgtctct cccctcctcc ctgggccctg tctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctcct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaactcc agtcctttcc cccttggggg ttgggggggg ccccccttt
240
ttttcccccc ctttcctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

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<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
  1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20          25          30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35          40          45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451
 <211> 589
 <212> DNA
 <213> Homo sapiens

```

<400> 2451
nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgcatc
60
tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tcgggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctcgctcccat
180acgcatggct cattacgggt ccgcttgat caggtcggtc gaatgctgcg      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccatcctgac gtcaccctcg tgcgtactga ggcgctgtct
360
attggcgctcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttcgggtccc
420
cggggcgctcc ccagggttgt cgtcgtcgaa gatgccgacc gcatcactga acgcggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctgggt gctgtgtgcc
540
cctactccag aggacgtcat cgtcacgac aggtcgagat gtcggcgcc
589

```

<210> 2452
 <211> 121
 <212> PRT
 <213> Homo sapiens

```

<400> 2452
Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
100              105              110
Thr Glu Ala Leu Ser Ile Gly Val Asp
115              120

```

<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
 nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc acactcaggg
 60
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acagggttggc acacgcacat gcccttgggt atgctcatgt ccattcatcc atcccagcct
 180
 gtgcacgtcc tctcactcct gtgttcacac ctatgcccaa atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgcgtggg catttgacgc atgactcaga acggagtatg ggggtggcgcg
 360
 gcgtggctgg ggaggtccca tcagcccgcc tctgaaaccc tccaacctg cccatcctgg
 420
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
 540
 gaccggccac gacgcagtgc ccacaggga caccagggtga catgggtgct gcactaggca
 600
 ggggtggcca gggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130 135 140
 Leu Ser Pro Arg Asp Arg Pro Arg Arg Ser Ala His Arg Asp His Gln
 145 150 155 160
 Val Thr Trp Val Leu His
 165

<210> 2455
 <211> 378
 <212> DNA
 <213> Homo sapiens

<400> 2455
 acgctgcggc agaagcgta gctgaccgtc ggagccgata tgtccccagg cgtcgtcagc
 60
 ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggctgc
 120
 aaagaactcg ttctgggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
 180
 gcgctgtttg caggcggtgt gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
 240
 ctgccgccgt tcatcaacgt gatgtcgctg gcggtggcac cgctgggcgg gttgatcggc
 300
 ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc
 360
 ggcatcgtcg ccaagaat
 378

<210> 2456
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2456
 Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro
 1 5 10 15
 Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile
 20 25 30
 Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser
 35 40 45
 Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala
 50 55 60
 Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu
 65 70 75 80
 Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly
 85 90 95
 Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val
 100 105 110
 Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn
 115 120 125

<210> 2457
 <211> 754
 <212> DNA
 <213> Homo sapiens

<400> 2457

cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
 60
 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggctccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttatc aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgatcctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcatcggt caccagagcc tatttgctgc aaaactttaa tgaagagggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
		35					40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
	50					55					60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65					70				75						80
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
			85					90					95		
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
			100					105					110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
		115					120					125			
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
	130					135					140				
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

<210> 2459
 <211> 382
 <212> DNA
 <213> Homo sapiens

```

<400> 2459
accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
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gctgggtcttg agggcggcgt cgtggctgag aaggctcgctg gtctgcccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgacccggcc
180
aaggtgaccc gttcggctct gcagaacgcc gcgtccatcg cggccctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggatgatatg
300
gacgggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

```

<210> 2460
 <211> 110
 <212> PRT
 <213> Homo sapiens

```

<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1          5          10          15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Val Val Ala Glu Lys Val
20          25          30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
35          40          45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
50          55          60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65          70          75          80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
85          90          95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100          105          110

```

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa aggggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
 60
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgatgtggta ttcgcagtcg cggatacgtc gcaacacacc tacacccaat tgccgcgacg
 180
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgctcga tggcgtcgac
 240
 ggctggaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc
 300
 atcaacctcg gcggctacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg
 360
 gtcgccccggg acaaacagga agccaagcgc aaggggcagc ggcaaagtgt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccaggggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag
 60
 ttccggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccaggt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcgggtg tttgagcggg
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
 nntcatgagg acatttcocct catatttggt ggtggtaaata ccctcctggg acacgggggaa
 60
 atgaccagag gctggcgggc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggct
 180
 ggggtgatgga taccggctgc cagagatggc tcaggtgccca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc ggggtgccggc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2466
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
 1 5 10 15
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
 20 25 30
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
 35 40 45
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
 50 55 60
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
 65 70 75 80
 Ser Pro

<210> 2467
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 2467
 atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
 60
 gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccgggtct ccagttcccc
 120
 gtcggccgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccgtct acctcgccgc tgctctcgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccagggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 2468
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1             5             10             15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20             25             30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35             40             45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50             55             60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
      65             70             75             80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85             90             95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469
 <211> 489
 <212> DNA
 <213> Homo sapiens

```

<400> 2469
gccggcgtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcattggaga tgaggaagag
180
gggaccagag cagaggggtca ggttggaaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcggttac attgaatctg ctcatctata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470
 <211> 115
 <212> PRT
 <213> Homo sapiens

```

<400> 2470
Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
1             5             10             15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20             25             30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35             40             45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50             55             60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```

65		70		75		80									
Lys	Gln	Glu	His	Ser	Leu	Val	Leu	Ser	Asp	His	Phe	Arg	Trp	Lys	Gly
				85					90					95	
Ser	Gly	Asn	Val	Gly	Glu	Asn	Thr	Phe	Trp	Cys	Arg	Tyr	Ile	Glu	Ser
			100					105					110		
Ala	His	Leu													
		115													

<210> 2471

<211> 779

<212> DNA

<213> Homo sapiens

<400> 2471

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tggccatcct ccgtgacatg tacacttcca atatgccggt gtttgagccg ttcatagatc
60
ctcacatggt ggccttgac ttctttcaca gtgaggacct ctgcttcacg aggctcataa
120
gaagaggagc taaggactat tttgtcatgg gggcgccaat ccactgcac tttactata
180
attctctcat ttctgagggc aatatcagct ccaagatgtg tccaggagtt cttaggataa
240
gcactgtaaa gatgaacttt cccataaacc ccaattgttc ctgggtcaat atgaattcca
300
ttcatacggt cacaaaagac tccctctgag gctctaagga gaatcagaag cttttgttcc
360
ttttctaagg gatttttctaa agtaccactt ttcagctccc cgcttgcaat gaccatgcat
420
gccacactca gaacattgct tctgtccaca gggaagtcta aggtcccat cacatacagc
480
cctttgaaga attggaaaat ctgtatccac aaggacagtt ctggtgggta aaatgagaac
540
gtcatcccca gggcctggaa tggatttggt gtatcctccc cagccttctt caacaccttg
600
ccatgtttca gggagggacc attttaaagc tgattcaggg gcagaggtag aagctgaaat
660
agttgggggc ataccttctt tcacccggag aatgacttga acttggcctt cacctaaaac
720
cagataggtg agttgcctca gctggtattt gaagaaccag tcacagcctt ggttctggc
779

```

<210> 2472

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2472

Met	Thr	Phe	Ser	Phe	Tyr	Pro	Thr	Glu	Leu	Ser	Leu	Trp	Ile	Gln	Ile
1				5					10				15		
Phe	Gln	Phe	Phe	Lys	Gly	Leu	Tyr	Val	Met	Gly	Thr	Leu	Asp	Phe	Pro
			20					25				30			
Val	Asp	Arg	Ser	Asn	Val	Leu	Ser	Val	Ala	Cys	Met	Val	Ile	Ala	Gly
		35					40				45				
Gly	Glu	Leu	Lys	Val	Gly	Thr	Leu	Glu	Asn	Pro	Leu	Glu	Lys	Glu	Gln

```

      50              55              60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg
65              70              75              80
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys
      85              90              95
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly
      100              105              110
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val
      115              120              125
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Ser Tyr Glu
      130              135              140
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His
145              150              155              160
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His
      165              170              175
Val Thr Glu Asp Gly
      180

```

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

```

nngtgaccca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
60
cgcattctgct ccaaggccca cagctggcag ccgnnggcat ccagaaccga taccggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacattctctg tgaccctcta cagggacccc
180
cacgtggacc agtatgagga caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
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300
ntgtccaagt ccncaactgag gctgcggctg aagccaaagt cagtgaagac ggtgcaggct
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gagctgagcc tcaactcttct cgggggtgctg ctgcgggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagtg atgtgggcaa cttggatgac
480
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgaggag ccgggctcga
540
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600
ggaggggttac ccggggccacc agccacttgc tgtgcccgcc ctgtgatggg aactcattac
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698

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<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
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 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
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 120
 ggctcggcca cgggctgccc gccccgtgc gaggctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag ctccccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagccccg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcgtt
 480

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga gggtggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcacgtgcc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag
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 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca
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 840
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 900
 aacccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
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 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
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Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25					30		
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40					45			
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
		50				55					60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70					75				80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
				85					90					95	
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
			100					105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
		115					120					125			
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
		130					135				140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145					150					155				160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

				165					170					175			
Glu	Val	Gly	Asp	Asn	Asp	Leu	Val	Tyr	Ile	Ser	His	Arg	Ala	Phe	Ser		
			180						185					190			
Gly	Leu	Asn	Ser	Leu	Glu	Gln	Leu	Thr	Leu	Glu	Lys	Cys	Asn	Leu	Thr		
		195					200					205					
Ser	Ile	Pro	Thr	Glu	Ala	Leu	Ser	His	Leu	His	Gly	Leu	Ile	Val	Leu		
	210					215					220						
Arg	Leu	Arg	His	Leu	Asn	Ile	Asn	Ala	Ile	Arg	Asp	Tyr	Ser	Phe	Lys		
225					230					235					240		
Arg	Leu	Tyr	Arg	Leu	Lys	Val	Leu	Glu	Ile	Ser	His	Trp	Pro	Tyr	Leu		
				245				250						255			
Asp	Thr	Met	Thr	Pro	Asn	Cys	Leu	Tyr	Gly	Leu	Asn	Leu	Thr	Ser	Leu		
		260						265					270				
Ser	Ile	Thr	His	Cys	Asn	Leu	Thr	Ala	Val	Pro	Tyr	Leu	Ala	Val	Arg		
	275						280					285					
His	Leu	Val	Tyr	Leu	Arg	Phe	Leu	Asn	Leu	Ser	Tyr	Asn	Pro	Ile	Ser		
	290					295					300						
Thr	Ile	Glu	Gly	Ser	Met	Leu	His	Glu	Leu	Leu	Arg	Leu	Gln	Glu	Ile		
305					310					315					320		
Gln	Leu	Val	Gly	Gly	Gln	Leu	Ala	Gly	Trp	Ser	Pro	Ala	Phe	Arg	Gly		
				325				330						335			
Leu	Asn	Tyr	Leu	Arg	Val	Leu	Asn	Val	Ser	Gly	Asn	Gln	Leu	Thr	Thr		
		340					345					350					
Leu	Glu	Glu	Ser	Val	Phe	His	Ser	Val	Gly	Asn	Leu	Glu	Thr	Leu	Ile		
	355					360					365						
Leu	Asp	Ser	Asn	Pro	Leu	Ala	Cys	Asp	Cys	Arg	Leu	Leu	Trp	Val	Phe		
	370					375					380						
Arg	Arg	Arg	Gly	Leu	Gln	Thr	Ser	Thr	Gly	Ser	Ser	Pro	Arg	Ala	Pro		
385					390					395					400		
Arg	Pro	Ser	Leu	Ser	Arg	Gly	Lys	Glu	Phe	Lys	Asp	Phe	Pro	Asp	Val		
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Leu

<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

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gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120

aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcgggc
180

ctgtccttgg ccgtgaccat ggaccctctg gagacccta tcaaggatgg catcctctac
240

cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300

ggaggcccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360

gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gcccccgga caccggtgcc
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 ttctctgtca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atgggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
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Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
		20					25					30			
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
	35					40					45				
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50				55					60					
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65				70				75						80	
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
			85					90					95		
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100					105					110		
Gly															

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

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 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatgtt ctacgccggt atctccattc cgctgggagg cggggcgtag
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1 5 10 15
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481
 <211> 484
 <212> DNA
 <213> Homo sapiens

<400> 2481
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 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctgggtatc gatgggtatca aaaacaagat tcacctgggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
 300
 gttgctagca gcttagaaga agcgtttaag tgccctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa
 420
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 480
 gctt
 484

<210> 2482
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 2482
 Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
 65 70 75 80
 Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
 85 90 95
 Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
 100 105 110
 Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
 115 120 125
 Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
 130 135 140
 Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
 145 150 155

<210> 2483
 <211> 477
 <212> DNA
 <213> Homo sapiens

<400> 2483
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 ctggagaaca ggcagcctct gaggaacct ctgatccccg atcagccacc ccacgcctg
 120
 cgtccccagc cgcttctctc tggecttggt ccccttccc tgtgaaggag agaacagttt
 180
 cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct cccaccttga
 240
 aatggtcctt cgtggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
 300
 cagttagggt gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
 360
 aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
 420
 gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
 477

<210> 2484
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2484
 Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
 1 5 10 15
 Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
 20 25 30
 Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
 35 40 45
 Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
 50 55 60
 Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
 65 70 75 80
 Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
 85 90 95

Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485
 <211> 608
 <212> DNA
 <213> Homo sapiens

<400> 2485
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 aagaccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctactgggca ccattcctgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgcac
 240
 ctcggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccggaagt cttcgctctgt ggtaccgccg cggttgtcac accgatcggc
 360
 tctttcctag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccattggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cgcccccaat gatgtgttca
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 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 2486
 Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
 100 105 110
 Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
 115 120 125
 Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
 130 135 140
 Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
 145 150 155 160
 Leu Lys Arg Val Cys
 165

<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

nnccccctcag gagagcagcc catggaaggt cccccccaag gggcccctga gagccctgac
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 120
 aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
 180
 cagctgggag gggctgctcc tcaggctcct gctgcccacc aaaagcccga ggcctcagt
 240
 gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
 300
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 339

<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
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 Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
 20 25 30
 Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
 35 40 45
 Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
 50 55 60
 Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
 65 70 75 80
 Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
 85 90 95
 Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
 100 105 110
 His

<210> 2489

<211> 594
 <212> DNA
 <213> Homo sapiens

<400> 2489
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 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtagacctt cgcgatcgga ggcgatgaccg gcgtactgct ggccatcccg
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctacttcca caacgtgatc
 240
 atcggcggcg cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc
 360
 ttcgtcgcgt tcatgccgct ctatgcactg ggtttcatgg gcatgaccgg ttgtttgaac
 420
 gccccccca cccctgagtg ggtcccgtac ctgtacgttg ccatggtcgg tgcactgatg
 480
 atcgctgtcg gtatcgccctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag
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 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca ccctggaatg gtcg
 594

<210> 2490
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2490
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
 1 5 10 15
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
 20 25 30
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
 35 40 45
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
 50 55 60
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
 65 70 75 80
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
 85 90 95
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
 100 105 110
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr
 115 120 125
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
 130 135 140
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
 145 150 155 160
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491
 <211> 592
 <212> DNA
 <213> Homo sapiens

<400> 2491
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 actacgttgt tgccctgggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgcag tgttcgaaaag cggaactgta ttccgcgcgcg tcaactccggc tgcggcaccg
 180
 cgtcccgggtg tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cgggtcaaggc tgactggcga cacgctgtgc tggtcgcccc gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggtcccatg gcatcccggg
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
 gctttggtag cctgcgctcc gagcgggtgg gaggtcatgg ttatttcaag gt
 592

<210> 2492
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 2492
 Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
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 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130 135 140
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
 145 150 155 160
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
 165 170 175
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
 180 185 190
 Met Val Ile Ser Arg
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<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

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 240
 atcccgctgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc
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 aagggcgcca ggccggggagc cgaccgctct tcctcgggtct acctccagct gacgtcgggtg
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 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
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 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
 35 40 45
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
 50 55 60
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
 65 70 75 80
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
 85 90 95
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
 100 105 110
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
 130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

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120
cggccagtgc ctactgccct ctcttgccgc cgcacactgc agccccgcac ctgccgcttg
180
cacctgcagc cccgcgctct acccggttca agcatggctg accaggcgcc cttcgacacg
240
gacgtcaaca cctgacccg cttcgtcatg gaggaggga ggaaggcccg cggcacgggc
300
gagttgacct agctgctcaa ctcgctctgc acagcagtca aagccatctc ttcggcggtg
360
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420
caagttaaga agctggacgt cctctccaac gacctgggta tgaacatggt aaagtcatcc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccatcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttggtgccc ttggaaccat ttttggcacc tatagaaaga aatcaactga tgagccttct
660
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720
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780
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1020
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1080
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1140
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1200
aaggtgatg agaagcactc tgcccagtga gcacctgccc tgctgcac cggagaattg
1260
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1320

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cctagagagc agaaataaaa agcatgacta tttccaccat caaatgctgt agaatgcttg
1380
gcactcccta accaaatgct gtctccataa tgccactggg gttaagatat attttgagtg
1440
gatggaggag aaataaaactt attcctcctt aaaaaaaaa
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<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
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<400> 2496															
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Phe	Val	Met	Glu 20	Glu	Gly	Arg	Lys	Ala 25	Arg	Gly	Thr	Gly	Glu 30	Leu	Thr
Gln	Leu	Leu 35	Asn	Ser	Leu	Cys	Thr 40	Ala	Val	Lys	Ala	Ile 45	Ser	Ser	Ala
Val	Arg 50	Lys	Ala	Gly	Ile	Ala 55	His	Leu	Tyr	Gly	Ile 60	Ala	Gly	Ser	Thr
Asn 65	Val	Thr	Gly	Asp	Gln 70	Val	Lys	Lys	Leu	Asp 75	Val	Leu	Ser	Asn	Asp 80
Leu	Val	Met	Asn 85	Met	Leu	Lys	Ser	Ser	Phe 90	Ala	Thr	Cys	Val	Leu	Val 95
Ser	Glu	Glu	Asp 100	Lys	His	Ala	Ile	Ile 105	Val	Glu	Pro	Glu	Lys	Arg	Gly 110
Lys	Tyr 115	Val	Val	Cys	Phe	Asp	Pro	Leu	Asp	Gly	Ser	Ser	Asn	Ile	Asp 125
Cys	Leu 130	Val	Ser	Val	Gly	Thr	Ile 135	Phe	Gly	Ile	Tyr	Arg	Lys	Lys	Ser 140
Thr 145	Asp	Glu	Pro	Ser	Glu 150	Lys	Asp	Ala	Leu	Gln 155	Pro	Gly	Arg	Asn	Leu 160
Val	Ala	Ala	Gly	Tyr 165	Ala	Leu	Tyr	Gly	Ser	Ala 170	Thr	Met	Leu	Val	Leu 175
Ala	Met	Asp	Cys 180	Gly	Val	Asn	Cys	Phe	Met	Leu	Asp	Pro	Ala	Ile	Gly 190
Glu	Phe 195	Ile	Leu	Val	Asp	Lys	Asp 200	Val	Lys	Ile	Lys	Lys	Lys	Gly	Lys 205
Ile	Tyr 210	Ser	Leu	Asn	Glu	Gly	Tyr 215	Ala	Lys	Asp	Phe	Asp	Pro	Ala	Val 220
Thr 225	Glu	Tyr	Ile	Gln	Arg	Lys	Lys 230	Phe	Pro	Pro	Asp	Asn	Ser	Ala	Pro 240
Tyr	Gly	Ala	Arg	Tyr 245	Val	Gly	Ser	Met	Val	Ala	Asp	Val	His	Arg	Thr 255
Leu	Val	Tyr	Gly 260	Gly	Ile	Phe	Leu	Tyr	Pro	Ala	Asn	Lys	Lys	Ser	Pro 270
Asn	Gly 275	Lys	Leu	Arg	Leu	Leu	Tyr	Glu	Cys	Asn	Pro	Met	Ala	Tyr	Val 285
Met 295	Glu	Lys	Ala	Gly	Gly	Met	Ala	Thr	Thr	Gly	Lys	Glu	Ala	Val	Leu 300
Asp 305	Val	Ile	Pro	Thr	Asp	Ile	His	Gln	Arg	Ala	Pro	Val	Ile	Leu	Gly 310
Ser	Pro	Asp	Asp	Val	Leu	Glu	Phe	Leu	Lys	Val	Tyr	Glu	Lys	His	Ser 320

Ala Gln 325 330 335

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
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 120
 atcctgtcag cgcggtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcggcccg tggctatggc gcctctgcag aggcagccccg aatcgcgtcg
 300
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag
 360
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 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
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 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499
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 tatgacgacc gcgcattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
 120
 tggatcacca tcctgcgcaa gcgcgacaac tttcgcaaag ccttcgacga tttccagccc
 180
 gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
 240
 gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
 300
 atggaaaaag gcccgggcctt ctccaggctg ctgtgggact tcgtcgac
 348

<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

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Gly	Val	Pro	Glu	Tyr	Asp	Asp	Arg	Ala	Leu	Tyr	Glu	Lys	Leu	Ile	Leu
		20					25						30		
Asp	Gly	Phe	Gln	Ala	Gly	Leu	Ser	Trp	Ile	Thr	Ile	Leu	Arg	Lys	Arg
	35					40						45			
Asp	Asn	Phe	Arg	Lys	Ala	Phe	Asp	Asp	Phe	Gln	Pro	Glu	Lys	Ile	Ala
	50					55					60				
Arg	Tyr	Asn	Glu	Lys	Lys	Val	His	Ala	Leu	Met	Asn	Asp	Ala	Gly	Ile
	65				70					75				80	
Val	Arg	Asn	Arg	Ala	Lys	Ile	Glu	Gly	Thr	Ile	Ala	Ser	Ala	Lys	Ala
		85						90						95	
Tyr	Leu	Asp	Ile	Met	Glu	Lys	Gly	Pro	Gly	Phe	Ser	Arg	Leu	Leu	Trp
		100					105						110		
Asp	Phe	Val	Asp												
		115													

<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

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 120
 acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg
 180
 ctttcaagag tcaaacaatt ttactgggtgc atcatttcca tttattcttt ctcttttgca
 240
 taataaaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
 300

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacatca aaaaaatcct
 360
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataacca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1				5					10					15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20					25					30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
		35					40				45				
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
	50				55					60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65					70					75				80	
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85						90					95	
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

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 120
 accaatgggg agegctttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca
 180
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgct
 240
 ctcgtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
 aaggcgggtca ccagtggcct gccgggggac acagctctcc tgttgcccc ctcacgcgt
 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504
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 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
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 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
 65 70 75 80
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
 85 90 95
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
 100 105 110
 Thr Ala Leu Leu Leu Pro Pro Ser Arg
 115 120

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 2505
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 ccgctcgtgt tggtgccgtt ggctcgggtc accggcgatc ggcgtctgat gggccaatgg
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 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggtcttc
 180
 aacgtgggtc tegtctcgca gacgggtcatg ggtgcatgat ccttgagggc agttttctgg
 240
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
 300
 cctctgcccc cgagctagcc aacgatttgg ccaactgcatt tcgcgggtac cctgctggag
 360
 tggcgatcct cactgacgat ggagcggctg ggcccagagg cttgacggtc tcctccctgg
 420
 cgtcgggtgc agtcgtcccc gctgttgtgt cggtgtcgtt gggtaatggg tcgacgaccc
 480
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 540

<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2506
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

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Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly			
20	25	30	
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala			
35	40	45	
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu			
50	55	60	
Val Val Glu Thr Val Met Gly Ala			
65	70		

<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

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 agcttcatgc ccccaggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
 120
 acggagcagt gccccctgtt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
 180
 ttccactggc acttcctcaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
 240
 ttcaactaca gccccgacgt gtactgctcc aagtacaacg aagccaccgg cgtgtgcccc
 300
 gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
 360
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 420
 aagaatgggc tgcactgtgc cttegcgcac gggcccatg acctccgctc ccctgtctac
 480
 gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
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 600
 gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc
 660
 aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
 720
 gaccggcggc ggagcccccg gaagcacaaa tacaggctcg ctccatgtcc aaacgtcaag
 780
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 840
 cacaccgca ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga
 900
 aggggggggg gggtgagggg gg
 922

<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens

<400> 2508

Pro Gly Cys Cys Arg Tyr Leu Lys Glu Phe Arg Thr Glu Gln Cys Pro
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 20 25 30
 His Trp His Phe Leu Asn Gln Arg Arg Arg Arg Pro Leu Arg Arg Arg
 35 40 45
 Asp Gly Thr Phe Asn Tyr Ser Pro Asp Val Tyr Cys Ser Lys Tyr Asn
 50 55 60
 Glu Ala Thr Gly Val Cys Pro Asp Gly Asp Glu Cys Pro Tyr Leu His
 65 70 75 80
 Arg Thr Thr Gly Asp Thr Glu Arg Lys Tyr His Leu Arg Tyr Tyr Lys
 85 90 95
 Thr Gly Thr Cys Ile His Glu Thr Asp Ala Arg Gly His Cys Val Lys
 100 105 110
 Asn Gly Leu His Cys Ala Phe Ala His Gly Pro His Asp Leu Arg Ser
 115 120 125
 Pro Val Tyr Asp Ile Arg Glu Leu Gln Ala Met Glu Ala Leu Gln Asn
 130 135 140
 Gly Gln Thr Thr Val Glu Gly Ser Ile Glu Gly Gln Ser Ala Gly Ala
 145 150 155 160
 Ala Ser His Ala Met Ile Glu Lys Ile Leu Ser Glu Glu Pro Arg Trp
 165 170 175
 Gln Glu Thr Ala Tyr Val Leu Gly Asn Tyr Lys Thr Glu Pro Cys Lys
 180 185 190
 Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro Tyr Tyr His
 195 200 205
 Asn Ser Lys Asp Arg Arg Arg Ser Pro Arg Lys His Lys Tyr Arg Ser
 210 215 220
 Ser Pro Cys Pro Asn Val Lys His Gly Asp Glu Trp Gly Asp Pro Gly
 225 230 235 240
 Lys Cys Glu Asn Gly Asp Ala Cys Gln Tyr Cys His Thr Arg Thr Glu
 245 250 255
 Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys Cys Asn Gly Arg
 260 265 270
 Gly Gly Gly Val Arg Glu
 275

<210> 2509

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2509

gccggccttg acctgggccc ggcgatggct ccacggcaag gtccaataact ccgtgcgctt
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 120
 gttcatgaac ggggtggagcc cggcaaaacc gaaactcaac caatccttgg ggatgctgga
 180
 cggcaggttg ccgagggcaa acacgttgac cacgttcgca ccgacaccac cgaccacggc
 240
 caccgctccc agcggaatct cgtagactta gcgccagggt tggtaaggcg tgtagcggtc
 300

gtaacgacgg gtgacctga actcggggct tcaaagtctt ctgctgtg
348

<210> 2510

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2510

Met	Ala	Pro	Arg	Gln	Gly	Pro	Ile	Leu	Arg	Ala	Leu	Val	Ala	Leu	Asp
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Phe	Val	Asp	Ala	Arg	Glu	Val	Leu	Leu	Pro	Ala	Thr	Ile	Gly	Leu	Asp
		20						25					30		
Val	His	Glu	Arg	Val	Glu	Pro	Gly	Lys	Thr	Glu	Thr	Gln	Pro	Ile	Leu
	35						40					45			
Gly	Asp	Ala	Gly	Arg	Gln	Val	Ala	Glu	Gly	Lys	His	Val	Asp	His	Val
	50				55					60					
Arg	Thr	Asp	Thr	Thr	Asp	His	Gly	His	Arg	Ser	Gln	Arg	Asn	Leu	Val
65				70					75					80	
Asp	Leu	Ala	Pro	Gly	Leu	Val	Arg	Arg	Val	Ala	Val	Val	Thr	Thr	Gly
			85					90					95		
Asp	Leu	Glu	Leu	Gly	Ala	Ser	Lys	Ser	Ser	Ala	Val				
			100					105							

<210> 2511

<211> 663

<212> DNA

<213> Homo sapiens

<400> 2511

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120
cctgtcatcg cacacgtcgg ttatccgcag gccgccgacg agtattacca gttgctttta
180
gcattacgcc caggacgcgt tgctggcctg gcggagatcg tcgtcaacgg tcaacctttt
240
accgtcactg acgccactga ggatgaacta gctctcactg cttgggctcg tatectctc
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360
gagccagttc ggctcgctaa gcgcttcggt ggtgagcaat cgaacacctc gatcatgggtg
420
ggcgacgcca tcatcatcaa aatgttccgc cgcttgagc ccggcgacaa ccttgacatc
480
accgtgcata gcgccctcaa cgatgccggg atctcatcgg tggccacatt gtacggcttt
540
atgtccggac agatccccgc tgaggaacac atcccggctg atctagctat gatcattgag
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aggttgccac agccccggga tggctgggaa ctcatcactg ccaaggcagt cgatctcgtc
660
gac
663

<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2512
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 Gly Arg Gly Gly Ser Leu Thr Arg Leu Leu Ser Leu Ala Pro Val Val
 20 25 30
 Asn Glu Gln Asp Leu Gln Val Leu Pro Val Ile Ala His Val Gly Tyr
 35 40 45
 Pro Gln Ala Ala Asp Glu Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
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 Val Asp Leu Ala Met Ile Ile Glu Arg Leu Pro Gln Pro Arg Asp Gly
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 Trp Glu Leu Ile Thr Ala Lys Ala Val Asp Leu Val Asp
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<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

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 240
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368

<210> 2514
<211> 93
<212> PRT
<213> Homo sapiens

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Ser Lys Val Arg Gln Leu Asp Leu Ala Lys Asn Arg Leu Tyr Gln Ala
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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His
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Ile His Arg Tyr Leu Cys Leu Asp Lys Ser Val Ile Glu Leu Ser Arg
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Gln Gly Lys Glu Gly Gln His Pro Lys Leu Glu His Asp
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<212> DNA
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351

<210> 2516
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<212> PRT
<213> Homo sapiens

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20 25 30
Pro Glu Gly Gly Arg Lys Ser Leu Leu Pro Pro Ser Pro Thr Gly Asn.
35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

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      50              55              60
Gly Gly Gln Thr Met Gly Gln His Thr Pro Ser Ala Pro Leu Gln Tyr
65              70              75              80
Gln His Ser Arg Pro Thr His Leu Gly Pro Trp Ser Pro Gly Asp Leu
      85              90              95
Thr Arg

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<210> 2517
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 <212> DNA
 <213> Homo sapiens

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aggccacaca ttccctgggg actgagctcc aagggtgctg gtccttgagc aggaagcggc
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cagtgttgag tgggcagtgt ctcactccag cccttccttc ccaggccagt tcttctcatc
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356

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<210> 2518
 <211> 103
 <212> PRT
 <213> Homo sapiens

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<400> 2518
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Ala Gly Gly Gly Ala Arg Ala Ser Pro Gly Val Arg Thr Cys His Gln
      20      25      30
Pro Asn Pro Met Gly Leu Phe Ser Ser Pro Asn Leu Ala Gly Leu Ala
      35      40      45
Glu Ala Thr His Ser Leu Gly Thr Glu Leu Gln Gly Ala Gly Ser Leu
      50      55      60
Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
65      70      75      80
Pro Ser Gln Ala Ser Ser Ser His Leu Pro Gln Ser Phe Pro Ser Arg
      85      90      95
Pro Ser Ser Thr Gly Gln Thr
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<210> 2519
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 <212> DNA
 <213> Homo sapiens

<400> 2519

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 480
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<210> 2520

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

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			20				25						30		
Leu	Pro	Cys	Trp	Gly	Arg	Cys	Ser	Ser	Ser	Phe	Gln	Arg	Arg	Lys	Arg
		35				40					45				
Gly	Trp	Gly	Val	Ala	Gly	Arg	Gly	Ser	Ser	Arg	Pro	Glu	Ser	Gln	Ser
		50				55				60					
Arg	Trp	Arg	Ala	Ala	Ser	Thr	Arg	Phe	Leu	Leu	Val	Gly	Leu	Arg	Gln
65					70				75					80	
Gly	Leu	Ala	Pro	Gly	Leu	Ser	Gly	Lys	Arg	Glu	Glu	Glu	Leu	Arg	Leu
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<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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			20					25					30		
Ala	Pro	Leu	Ala	Leu	Val	Gly	Val	Thr	Leu	Leu	Leu	Ala	Ala	Pro	Pro
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Cys	Ser	Gly	Ala	Ala	Thr	Pro	Thr	Pro	Ser	Leu	Pro	Pro	Pro	Pro	Ala
	50					55					60				
Asn	Asp	Ser	Asp	Thr	Ser	Thr	Gly	Gly	Cys	Gln	Gly	Ser	Tyr	Arg	Cys

1808

			500					505					510				
Leu	Leu	Asn	Leu	Arg	Val	Gly	Asp	Ala	Gln	Gly	Met	Phe	Glu	Pro	Asp		
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Gly	Gly	Gly	Arg	Pro	Lys	Gly	Arg	Leu	Val	Ala	Pro	Leu	Leu	Ala	Thr		
		530				535					540						
Val	Thr	Ile	Leu	Asp	Asp	Asp	His	Ala	Gly	Ile	Phe	Ser	Phe	Gln	Asp		
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Arg	Leu	Leu	His	Val	Ser	Glu	Cys	Met	Gly	Thr	Val	Asp	Val	Arg	Val		
				565					570						575		
Val	Arg	Ser	Ser	Gly	Ala	Arg	Gly	Thr	Val	Arg	Leu	Pro	Tyr	Arg	Thr		
			580					585						590			
Val	Asp	Gly	Thr	Ala	Arg	Gly	Gly	Gly	Val	His	Tyr	Glu	Asp	Ala	Cys		
		595					600					605					
Gly	Glu	Leu	Glu	Phe	Gly	Asp	Glu	Thr	Met	Lys	Thr	Leu	Gln	Val			
		610				615				620							
Lys	Ile	Val	Asp	Asp	Glu	Glu	Tyr	Glu	Lys	Lys	Asp	Asn	Phe	Phe	Ile		
625					630				635						640		
Glu	Leu	Gly	Gln	Pro	Gln	Trp	Leu	Lys	Arg	Gly	Ile	Ser	Ala	Leu	Leu		
				645				650						655			
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			660					665				670					
Ala	Arg	Arg	Ile	Ala	Glu	Met	Gly	Lys	Pro	Val	Leu	Gly	Glu	Asn	Cys		
			675				680					685					
Arg	Leu	Glu	Val	Ile	Ile	Glu	Glu	Ser	Tyr	Asp	Phe	Lys	Asn	Thr	Val		
						695				700							
Asp	Lys	Leu	Ile	Lys	Lys	Thr	Asn	Leu	Ala	Leu	Val	Ile	Gly	Thr	His		
705					710					715					720		
Ser	Trp	Arg	Glu	Gln	Phe	Leu	Glu	Ala	Ile	Thr	Val	Ser	Ala	Gly	Asp		
				725				730						735			
Glu	Glu	Glu	Glu	Glu	Asp	Gly	Ser	Arg	Glu	Glu	Arg	Leu	Pro	Ser	Cys		
			740					745				750					
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe		
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Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly		
		770				775					780						
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu		
785					790				795						800		
Ala	Ser	His	Phe	Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala		
				805				810						815			
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser		
			820					825					830				
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn		
		835					840					845					
Val	Thr	Gly	Ser	Asn	Ala	Val	Asn	Val	Phe	Leu	Gly	Leu	Gly	Val	Ala		
		850				855				860							
Trp	Ser	Val	Ala	Ala	Val	Tyr	Trp	Ala	Val	Gln	Gly	Arg	Pro	Phe	Glu		
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				885				890						895			
Ala	Phe	Val	Gly	Ile	Ala	Val	Leu	Leu	Tyr	Arg	Arg	Arg	Pro	His	Ile		
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Gly	Gly	Glu	Leu	Gly	Gly	Pro	Arg	Gly	Pro	Lys	Leu	Ala	Thr	Thr	Ala		
		915				920						925					
Leu	Phe	Leu	Gly	Leu	Trp	Leu	Leu	Tyr	Ile	Leu	Phe	Ala	Ser	Leu	Glu		

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950

940

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<211> 392
<212> DNA
<213> Homo sapiens

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392

<210> 2524
<211> 130
<212> PRT
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<400> 2524
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20 25 30
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
35 40 45
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
50 55 60
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
65 70 75 80
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
85 90 95
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
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Arg Xaa
130

<210> 2525
<211> 378
<212> DNA
<213> Homo sapiens

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<210> 2526

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2526

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	35					40					45				
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
	50					55				60					
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65				70				75						80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
			85					90						95	
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
		100						105						110	

<210> 2527

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2527

ntggtcacct tccgaatggg acggcggccc aaaccgcgaga tcatggccag caaagagcag
 60
 cagatccaga gagacgacct tggagccagt ccccagagca gcagccagcc agaccacggc
 120
 cgctctctcc cccagaagc tcccgacagg ccaccatct ccacggcctc cgagacctca
 180
 gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg
 240
 gagtacaaga agctaaagaa agtgggagac tggattcttg ccaccagcgc catcccccca
 300

cgcgt
305

<210> 2528
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2528
Xaa Val Thr Phe Arg Met Gly Arg Arg Pro Lys Pro Glu Ile Met Ala
1 5 10 15
Ser Lys Glu Gln Ile Gln Arg Asp Asp Leu Gly Ala Ser Pro Gln
20 25 30
Ser Ser Ser Gln Pro Asp His Gly Arg Leu Ser Pro Pro Glu Ala Pro
35 40 45
Asp Arg Pro Thr Ile Ser Thr Ala Ser Glu Thr Ser Val Tyr Val Thr
50 55 60
Trp Ile Pro Arg Gly Asn Gly Gly Phe Pro Ile Gln Ser Phe Arg Val
65 70 75 80
Glu Tyr Lys Lys Leu Lys Lys Val Gly Asp Trp Ile Leu Ala Thr Ser
85 90 95
Ala Ile Pro Pro Arg
100

<210> 2529
<211> 387
<212> DNA
<213> Homo sapiens

<400> 2529
acgcgtctcc ccgtgggtggg tcccgatccc ccggccgggt ctgccactga agcctctccc
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tgtgtcctcc gtgccccccg agtggcctgc tagcccgtc tcccacacag tctccttgat
120
gtgaagtgtc acccggcttg ctgcggcggtg tctccgccgt aacacgtgta taccgggtca
180
gccatggcgg cggctgctgg gaaggctcct gcgtatggct ttgccatccg ggaccggggc
240
tttgctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca
300
cgtttgtgtc ttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag
360
ccatgagctc cacagggtcc tgaggga
387

<210> 2530
<211> 121
<212> PRT
<213> Homo sapiens

<400> 2530
Met Ala Phe Val Thr Glu Thr Lys Ser Ile His Lys Ser Pro Thr Leu
1 5 10 15
Trp Lys Asp Thr Asn Val His Gly Pro Gly Tyr Leu Trp Pro Ser Ser

			20					25					30				
Ala	Gln	Lys	Pro	Thr	Pro	Ala	Glu	Gln	Ser	Pro	Gly	Pro	Gly	Trp	Gln		
		35					40					45					
Ser	His	Thr	Gln	Glu	Pro	Ser	Gln	Gln	Pro	Pro	Pro	Trp	Leu	Ser	Arg		
	50					55					60						
Tyr	Thr	Arg	Val	Thr	Ala	Glu	Thr	Arg	Arg	Ser	Lys	Pro	Gly	Asp	Thr		
65					70				75						80		
Ser	His	Gln	Gly	Asp	Cys	Val	Gly	Glu	Arg	Ala	Ser	Arg	Pro	Leu	Gly		
			85					90					95				
Gly	His	Gly	Gly	His	Arg	Glu	Arg	Leu	Gln	Trp	Gln	Ser	Arg	Pro	Gly		
		100					105					110					
Asp	Arg	Asp	Pro	Pro	Arg	Gly	Asp	Ala									
		115					120										

<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc
180
agttaaagat atgctagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaatcctt taggtctcaa ttctttccct agagagacaa ggagcacagt
300
tcgttcccaa ggccccccat gcttggcgag ggcgtctctg ctttccaggc agggctctgc
360
tgccctccacc cacgtgcagg gaaaggaagg acgcgt
396

<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

Met	Thr	Arg	Leu	Asn	Pro	Lys	Ser	Leu	Gln	Leu	Cys	Val	Ile	Ser	Ser		
1			5					10					15				
Ala	Ala	Leu	Glu	Met	Thr	Lys	Ile	Val	Leu	Arg	Gly	Asn	Arg	Pro	Ser		
		20					25					30					
Ser	Ser	Val	Lys	Asp	Met	Leu	Ala	Phe	Leu	Phe	Leu	Pro	Asp	Ile	Pro		
		35				40					45						
Glu	Ser	Arg	Glu	Leu	Ser	Cys	Asn	Ala	Ser	Asn	Pro	Leu	Gly	Leu	Asn		
	50				55					60							
Ser	Phe	Pro	Arg	Glu	Thr	Arg	Ser	Thr	Val	Arg	Ser	Gln	Gly	Pro	Pro		
65				70				75						80			
Cys	Leu	Ala	Arg	Ala	Ser	Leu	Leu	Ser	Arg	Gln	Gly	Pro	Ala	Ala	Ser		
			85				90						95				
Thr	His	Val	Gln	Gly	Lys	Glu	Gly	Arg									

100

105

<210> 2533
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 2533
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 gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag
 120
 aggcgctacc ggggtctcct gcactgtatg gtgaccagcg ttcgagagga gggaccccg
 180
 gtccttttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc
 240
 ttcgtcgct atgaggcagt gctgaggctc gcccggggctc tgctcacata gccgggtcccc
 300
 acgcccagcg gccacccac cagcagctgc tggaggctcgt agtggctgga ggaggcaagg
 360
 ggtagtggtg ctgggttcgg gacccacacag ggccattgcc caggagaatg aggagcctcc
 420
 ctgcagtgtt gtcggccgag gcctgagctc gccctgccca gctactgacc tcaggtcgag
 480
 gggcccgcca gccat
 495

<210> 2534
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2534
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 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
 20 25 30
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
 65 70 75 80
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
 85 90 95

<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 2535
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 60

cgtcggtggt aggctgctac catgaggttg aatcagaaca ccttgctgct ggggaagaag
120
gtggtccttg taccctacac ctcgagcat gtgccagca ggtaccacga gtggatgaaa
180
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
atgcagtgca gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag
300
aagtggcagg ccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc
360
ttcctcacag atctagaaga cccaccttg ggggagatcg aggtcatgat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg
480
accacgctag gtctgaccaa gtttgaggct aaaattgggc aaggaaatga accaagcatc
540
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggagggtg
600
accctcagac tgacagtgag tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgctg
720
ggcagccact ctgtgtgagc aggggtgttg gcccatacac ttcaaagacc agagccctgc
780
actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg
840
cggggcttgc tgtggcctcc ctccagctag tgggtgtggct gagcagactc cagggccagg
900
gccagttccc ttctcccctc ccggccaaac ccagaccag actctaggaa gctggaatgg
960
agggcagggg tccatgggag atgtcgggat gaagggtggg gctggagggtg cagggggacc
1020
tggaacatgg atgggagtgg acaggccttt ctcttagag gccagagggtg ctgccctggc
1080
tgggagtga gctccaggca ctaccagctt tcctgatttt ccggttggt ccatgtgaag
1140
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgctct
1200
gcagaggcag gctggtgtga ccctgggaac ttgaccggg aacaacaggt ggtccagagt
1260
gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga
1320
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat
1380
aaagctcagg gggcactgag gaagcagagg ccccttgggg gtgccctcct gaagagagcg
1440
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1560
ggctacctgg caccctatgg ctacaaaagt agagtggcc cagtttcctt ccacctgagg
1620
ggagcactct gactcctaac agtcttcctt gccctgccat catctggggg ggctggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattcttcca
 1740
 ggtggggaaa cagtcttaga taagtaagggt gacttgcccta aggcctccca gcacccttga
 1800
 tcttggagtc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat
 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
1				5					10					15	
Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20					25					30		
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35					40					45			
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
		50				55					60				
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65					70				75					80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
				85					90					95	
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
			100					105					110		
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
		115					120					125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
		130				135					140				
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145					150				155					160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165					170						175	
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
		180						185					190		
His	Val	Glu	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys	
		195					200					205			

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

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 gatgtcatcg tgctgcggtt ttccggagcc atggcgaagc gtccctgcctc agttatcctt
 120
 ccgctgctac tgctcgactc ccccgtcatt gcgtgggtggc ccttctccgg ccctgacaac
 180

ctcgccctcgg accccatcgg agcccttgcg gaccgcccga tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttgagg ctcgcaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctc agcgggtgac aaccgacgag
 480
 cccggcatct ccgcatcgt catgtcgac
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5					10					15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50				55					60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70					75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
		115					120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135					140				
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
				165											

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

aagcttctac tgccgcgagc acgtcgtcca ccgtcgaggt catggttcta gtttgccgcg
 60
 tcgcgccatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcgggtg
 180

ggggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcactcc tctgcccctc
 240
 gtagtggcca atatgaccgc aatttccgga cgtcgcatgg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatatc ccggcgggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac accccagtca ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2540
 Phe Ala Ala Ser Arg His Asp Pro Arg Ile Val Thr Trp Asp Asn Gly
 1 5 10 15
 Tyr Val Arg Phe Leu Asn Glu Gln Pro Asn Tyr Asp Leu Thr Tyr Asp
 20 25 30
 Asp Val Phe Met Ala Pro Asn Arg Ser Ser Val Gly Ser Arg Met Asn
 35 40 45
 Val Asp Leu Thr Ser Thr Asp Gly Leu Gly Thr Pro Leu Pro Leu Val
 50 55 60
 Val Ala Asn Met Thr Ala Ile Ser Gly Arg Arg Met Ala Glu Thr Ile
 65 70 75 80
 Ala Arg Arg Gly Gly Ile Ala Val Leu Pro Gln Asp Ile Pro Ala Asp
 85 90 95
 Phe Val Ala Arg Ser Ile Arg Arg Val Lys Asp Ala His Thr Arg Phe
 100 105 110
 Asp Thr Pro Val Thr Val Asn Pro Thr Thr Thr Val Gly Glu Ala Met
 115 120 125
 Asn Leu Leu Asn Lys Arg
 130

<210> 2541
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 2541
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 60
 ccttgcattg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatttg ctgcacacct ccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgtact
 300
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccacg catggtaccg acatccttct ggaatgtccc gcacagagggc tgatatatgt
 420
 gcacagttct cactgttctg cgtgcccagc ccctcacact ggacgcccac ctcacactct
 480
 tctgccaagg gagactttgg ttctccctt ccctgtgctg gctgtgcggg ccacagtcct
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2542

Met	Leu	Cys	Thr	His	Phe	Leu	Ile	Phe	Cys	Val	Glu	Ser	Thr	Ser	Phe
1				5				10						15	
Cys	Thr	Gln	Ile	Phe	Gly	Phe	His	Asn	Lys	Leu	His	Cys	Ser	His	Leu
		20						25					30		
Lys	Ile	Phe	Ile	Thr	Arg	Glu	Thr	Thr	Ala	Trp	Tyr	Arg	His	Pro	Ser
		35					40					45			
Gly	Met	Ser	Arg	Thr	Glu	Ala	Asp	Ile	Cys	Ala	Gln	Phe	Ser	Leu	Phe
	50					55					60				
Cys	Val	Pro	Ser	Pro	Ser	His	Trp	Thr	Pro	Thr	Ser	His	Ser	Ser	Ala
65					70					75				80	
Lys	Gly	Asp	Phe	Gly	Ser	Pro	Leu	Pro	Cys	Ala	Gly	Cys	Ala	Gly	His
			85						90					95	
Ser	Pro	Leu	His	Ala	Ser	Ser	Met	Thr	Arg						
		100						105							

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<210> 2543

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2543

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 60
 aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta
 120
 ccgctcctga tgagatTTTT gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 ttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggctgtttgc ttactgggtc ccaattttta gccttctgaa gcccctgtcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2544

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Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
           20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
           35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
           50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro'Pro Ala Gly
65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
           85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
           100          105          110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
           115          120

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<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

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gcgattattt tcgtgctgcc cggacttatc atggtcggct ggtggtcagg tttcccgtac
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120
ctgcgtcggg cctcgtgac aggctcgat ctccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgcga
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tgttgtcgga tcttaagctt
300
gtgaagtcgg cgctgaccaa gcctttcaag acgggc
336

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<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

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Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
           20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
           35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
           50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

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65		70		75		80									
Val	Ile	Ile	Val	Gly	Ser	Val	Val	Ser	Ala	Ala	Tyr	Ala	Leu	Leu	Ser
				85					90					95	
Asp	Leu	Lys	Leu	Val	Lys	Ser	Ala	Leu	Thr	Lys	Pro	Phe	Lys	Thr	Gly
			100					105					110		

<210> 2547
 <211> 556
 <212> DNA
 <213> Homo sapiens

<400> 2547
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 60
 ttccacacac tctcaccata tctactttctc tttacttttt aaagacaggg cacttgcctt
 120
 tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacaa aggttataaa
 180
 cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
 240
 caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
 300
 agggacaccc agccttgcta cgttgcgtgt cattatgtgg tgctgtgcta tccatagaga
 360
 aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
 420
 catcaccaca atatgaaggc ctccttggtg taaatgactt ttttaggtcc caataagaaa
 480
 taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
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 tatcagatca tctaga
 556

<210> 2548
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2548
 Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
 1 5 10 15
 Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
 20 25 30
 Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
 35 40 45
 Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
 50 55 60
 Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
 65 70 75 80
 Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
 85 90 95
 Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
 100 105

<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
 nnccagcctc tctccgaccg cgtacgtatt gaatttgata aagaagccaa cacggttggt
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 atcgatgata atgggtgctgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta
 240
 acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgcctg ggtatctgat
 300
 ggttctgggtg aatttactat tgagacgatc gataaagcga ctcgtgggtac acgcattact
 360
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
 420
 acaaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
 1 5 10 15
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

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<210> 2552
<211> 134
<212> PRT
<213> Homo sapiens
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<210> 2553
<211> 380
<212> DNA
<213> Homo sapiens
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 gacctctctg gccctgtcc tggtccacc ctgagctgct ggcaggtggg tcaccaggcc
 300
 tctgccccaa gaaactcctg caggcagctc tggacccct gtcttacaca ccttctcact
 360
 gagcctgcca gcatcccagn
 380

<210> 2554
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2554
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly
 1 5 10 15
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr
 20 25 30
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys
 35 40 45
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly
 50 55 60
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln
 65 70 75 80
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp
 85 90 95
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro
 100 105 110

<210> 2555
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2555
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 gataacgcga ataatggtag tgctgttcta gtgtcacag acctgggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgtcgttg gcctcggtat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgctcgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat
 360
 cacgcggn
 368

<210> 2556
 <211> 102
 <212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

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attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcaccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa ggggtggcaag atcgggtctct tcggtgggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgcag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcggtc agatgaat
408

```

<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65              70              75              80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
              85              90              95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
              100              105              110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
              115              120              125
Ala Leu Val Phe Gly Gln Met Asn
              130              135

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<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

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tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
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gctttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa tttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aagggtgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

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<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

```

Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1              5              10              15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
              20              25              30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
              35              40              45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
              50              55              60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65              70              75              80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
              85              90              95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
              100              105              110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
              115              120              125
Lys

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<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
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 atgtggagcc atttgaacag gtcctctcttc tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaataaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtgggttat gaagggtcaa aatgtatcta tgttttggtc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 ggaaaagggtg aacctgcat ttttaaccta agcatcacag aagcccatga atcaggcccc
 360
 tacaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

<400> 2563

ggatcccaga cgagtgtggt cagcagtatg ggggccgtgg gggcgacggc caccgtcagc
60
accccggtca ccatccagaa catgacctcc tcttatgtca ccatcacatc ccatgtcctt
120
aaggccttta ccctttggga acaggcagag gccctcaciaa ggaagaacia agaattcttt
180
gtcagctca gcacaaaagt gcgcgtgttg gccctcaaca gcagcctggt ggacctggtg
240
cactacaciaa ggcagggcct ccagcgg
267

<210> 2564

<211> 89

<212> PRT

<213> Homo sapiens

<400> 2564

Gly	Ser	Gln	Thr	Ser	Ala	Gly	Ser	Ser	Met	Gly	Ala	Val	Gly	Ala	Thr
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Ala	Thr	Val	Ser	Thr	Pro	Val	Thr	Ile	Gln	Asn	Met	Thr	Ser	Ser	Tyr
			20					25					30		
Val	Thr	Ile	Thr	Ser	His	Val	Leu	Lys	Ala	Phe	Thr	Leu	Trp	Glu	Gln
		35					40					45			
Ala	Glu	Ala	Leu	Thr	Arg	Lys	Asn	Lys	Glu	Phe	Phe	Ala	Gln	Leu	Ser
	50					55					60				
Thr	Lys	Val	Arg	Val	Leu	Ala	Leu	Asn	Ser	Ser	Leu	Val	Asp	Leu	Val
65					70					75				80	
His	Tyr	Thr	Arg	Gln	Gly	Leu	Gln	Arg							
					85										

<210> 2565

<211> 333

<212> DNA

<213> Homo sapiens

<400> 2565

cttcgcactg ctccgcgagt tcttggggga gtgagcacag cgcgtaagct cagccacgtg
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tggttcgaat tcgattcctt ggtcaatgcc cgtgacgtgg gcggaatccc ccccccgat
120
gggccggtga aatcccagcg actgatccgc agcgacaacc tgcaggccct caccgaggcc
180
gacatcgccc agttgcagca actcgggtgtc tccgatgtgg tcgatctgcg ttccacctat
240
gaggtggcca gcgagggccc ggggccgctg accgggctg gggtgaccat ccacccccat
300
tccttcctgc ccgaccagca cgccaatgtg cac
333

<210> 2566

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2566

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Leu Arg Thr Ala Pro Arg Val Leu Gly Gly Val Ser Thr Ala Arg Lys
 1             5             10             15
Leu Ser His Val Trp Phe Glu Phe Asp Ser Leu Val Asn Ala Arg Asp
          20             25             30
Val Gly Gly Ile Pro Thr Pro Asp Gly Pro Val Lys Ser Gln Arg Leu
      35             40             45
Ile Arg Ser Asp Asn Leu Gln Ala Leu Thr Glu Ala Asp Ile Ala Gln
    50             55             60
Leu Gln Gln Leu Gly Val Ser Asp Val Val Asp Leu Arg Ser Thr Tyr
65             70             75             80
Glu Val Ala Ser Glu Gly Pro Gly Pro Leu Thr Gly Arg Gly Val Thr
          85             90             95
Ile His Pro His Ser Phe Leu Pro Asp Gln His Ala Asn Val His
      100             105             110

```

<210> 2567

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2567

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ngaattcaaa ctggtgttcg tatgggccat aagcaaggta catatacgat gcgttttaga
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agccagttca cagatcaacg tctattcgga accgatcaat ttagtattgg tgggcgctat
120
tctgtacgag gtttttagtgg agaagaaacc ttaagagggtg actcggggcta ttatgtacaa
180
aatgaatggg cattaccatt tagaaaacaa caaattactc catatgtagg gatagatatt
240
ggacatgtat gggggccatc tacagaaact caattaggta ataccttaat tgggtggtgta
300
gttggtgtac gtggtatggt tggtgacgat gtaaactatg atgtatcact aggaacacca
360
attaagaaac cagaaggttt tgatacagat acgcgt
396

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<210> 2568

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2568

```

Xaa Ile Gln Thr Gly Val Arg Met Gly His Lys Gln Gly Thr Tyr Thr
 1             5             10             15
Met Arg Phe Arg Ser Gln Phe Thr Asp Gln Arg Leu Phe Gly Thr Asp
          20             25             30
Gln Phe Ser Ile Gly Gly Arg Tyr Ser Val Arg Gly Phe Ser Gly Glu
      35             40             45
Glu Thr Leu Arg Gly Asp Ser Gly Tyr Tyr Val Gln Asn Glu Trp Ala
    50             55             60
Leu Pro Phe Arg Lys Gln Gln Ile Thr Pro Tyr Val Gly Ile Asp Ile

```

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<210> 2571
<211> 335
<212> DNA
<213> Homo sapiens
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<400> 2571
gaattcgcca atgtttttctc cggatatgggc tccacagtaa cccttatcgg ccgctcccct
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gtgctcctta aacatctcga taatgaacta tctgagctct ttactgagat cgctcgggag
120
aatgggatg tccgttttagg gcagggaacg acagctatcg accaggtgga gaagcagcgt
180
gaagatgggt cttcctactt cgaaaccacc attacatttg aagacggcag cactgttacc
240
ggtgacgcat tcctagttgc taccggacgt acccctaaca ccgaccgcct tggcctcgac
300
aatggttccg gtgtgaagggt tgaaagggga cgcgt
335

<210> 2572
<211> 111
<212> PRT
<213> Homo sapiens

<400> 2572
Glu Phe Ala Asn Val Phe Ser Gly Met Gly Ser Thr Val Thr Leu Ile
1 5 10 15
Gly Arg Ser Pro Val Leu Leu Lys His Leu Asp Asn Glu Leu Ser Glu
20 25 30
Leu Phe Thr Glu Ile Ala Arg Glu Lys Trp Asp Val Arg Leu Gly Gln
35 40 45
Gly Thr Thr Ala Ile Asp Gln Val Glu Lys Gln Arg Glu Asp Gly Ser
50 55 60
Ser Tyr Phe Glu Thr Thr Ile Thr Phe Glu Asp Gly Ser Thr Val Thr
65 70 75 80
Gly Asp Ala Phe Leu Val Ala Thr Gly Arg Thr Pro Asn Thr Asp Arg
85 90 95
Leu Gly Leu Asp Asn Gly Ser Gly Val Lys Val Glu Arg Gly Arg
100 105 110

<210> 2573
<211> 460
<212> DNA
<213> Homo sapiens

<400> 2573
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gccggatcca taccggaccg ttctcgtcagg gtggtcggac atcgacgaca ccgcagatgc
120
cgagacgacg ttgatacgtc caccggcgcg gtccgtgac caccgccgtcg tcgccgttgc
180
cgccactggc acgatgaggg ccatcaccga gaagagaacg gccaccactc gcagaccacc
240
tcgtcccaga agagcgagga cgaaggcgat gacggcgatg accagagccg gtacagccaa
300
cgatcccacc agaacggagg agatgaagggt gagggcattg tgtgagggga ggatcgcggc
360

cactgaccac gccagtaccg gcaggggtcag gatcagcccc acgagaccgg aagtgatgcg
 420
 tagccaggaa tgacgggagg ttttcgtgtc agccacgcgt
 460

<210> 2574
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2574
 Met Gly Thr Val Asp Leu Gly Arg Leu Val Arg Ala Gly Ser Ile Pro
 1 5 10 15
 Asp Arg Phe Val Arg Val Val Gly His Arg Arg His Arg Arg Cys Arg
 20 25 30
 Asp Asp Val Asp Thr Ser Thr Gly Ala Val Arg Asp Pro Arg Arg Arg
 35 40 45
 Arg Arg Cys Arg His Trp His Asp Glu Gly His His Arg Glu Glu Asn
 50 55 60
 Gly His His Ser Gln Thr Thr Ser Ser Gln Lys Ser Glu Asp Glu Gly
 65 70 75 80
 Asp Asp Gly Asp Asp Gln Ser Arg Tyr Ser Gln Arg Ser His Gln Asn
 85 90 95
 Gly Gly Asp Glu Gly Glu Gly Ile Val
 100 105

<210> 2575
 <211> 3954
 <212> DNA
 <213> Homo sapiens

<400> 2575
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 120
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 360
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 420
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 480
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 660

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780
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960
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1140
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1740
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1800
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1860
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1980
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2040
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2100
gccacgctgg agggattaca agaggttgtg ggccggctcc aggatcgtgt ggatgcccag
2160
gatgagacag ctgcagagtt cacactacgg ctgaatctca ctgcggcccc gctaggccaa
2220
ctggaggggc tgctgcaggc ccatggggat gagggctgtg gggcctgtgg cggagtccaa
2280

gaggaactag gccgccttcg ggatggtgtg gagcgctgct cctgccccct gttgcctcct
2340
cggggtcctg gggctggtcc aggtgttggg ggcccaagcc gtggggccct ggacggcttc
2400
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2520
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2640
ctagaggagg gacaagcaca ggccggccag tgccccagct tagagggcg attgggccgt
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cttgaggggtg tctgtgaacg gttggacact gtggctgggg gactgcaggg cctgcgcgag
2760
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2820
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2880
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2940
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<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

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			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
		35					40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75					80
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85					90					95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
			100					105					110		
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
Cys	Ala	Glu	Ser	Pro	Ala	Pro	Ala	Leu	Gly	Pro	Ala	Ser	Ser	Thr	Pro
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Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
145					150					155					160
Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
			165						170					175	
Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
		180					185						190		
Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
		195					200					205			
Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
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Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
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Gln	His	Gln	Leu	Gln	Leu	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln
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Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
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Glu	Leu	Leu	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Glu	Ser	Cys	Ser	Val
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Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
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Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
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Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg

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 385 390 395 400
 Thr Ser Leu Ala Ser Arg Leu Ser Arg Leu Glu Asp Arg Phe Asn Ser
 405 410 415
 Thr Leu Gly Pro Ser Glu Glu Gln Glu Glu Ser Trp Pro Gly Ala Pro
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 Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln
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 485 490 495
 Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg
 500 505 510
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 Gln Ala Thr Leu Glu Gly Leu Gln Glu Val Val Gly Arg Leu Gln Asp
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 Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala
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 660 665 670
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 675 680 685
 Ile Asn Arg Leu Gln Gln Glu Ala Thr Glu His Ala Thr Glu Ser Glu
 690 695 700
 Glu Arg Phe Arg Gly Leu Glu Glu Gly Gln Ala Gln Ala Gly Gln Cys
 705 710 715 720
 Pro Ser Leu Glu Gly Arg Leu Gly Arg Leu Glu Gly Val Cys Glu Arg
 725 730 735
 Leu Asp Thr Val Ala Gly Gly Leu Gln Gly Leu Arg Glu Gly Leu Ser
 740 745 750
 Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr
 755 760 765
 Ser Gln Met Gln Ala Ala Leu Leu Glu Lys Leu Val Gly Gly Gln Ala
 770 775 780
 Gly Leu Gly Arg Arg Leu Gly Ala Leu Asn Ser Ser Leu Gln Leu Leu


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785              790              795              800
Glu Asp Arg Leu His Gln Leu Ser Leu Lys Asp Leu Thr Gly Pro Ala
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Gly Glu Ala Gly Pro Pro Gly Pro Pro Gly Leu Gln Gly Pro Pro Gly
              820              825              830
Pro Ala Gly Pro Pro Gly Ser Pro Gly Lys Asp Gly Gln Glu Gly Pro
              835              840              845
Ile Gly Pro Pro Gly Pro Gln Gly Glu Gln Gly Val Glu Gly Ala Pro
              850              855              860
Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
865              870              875              880
Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
              885              890              895
Gly Gly Tyr Tyr Asp Pro Glu Thr Gly Val Phe Thr Ala Pro Leu Ala
              900              905              910
Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
              915              920              925
Val Glu Ala Val Leu Ser Arg Ser Asn Gln Gly Val Ala Arg Val Asp
              930              935              940
Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu
945              950              955              960
Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro
              965              970              975
Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu
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 <212> DNA
 <213> Homo sapiens

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240
tgccctgcct gggctctcaa tgggggctcg gggcctcaca gggccagcac gagccacttg
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<210> 2578
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2578

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Val His Ser Ser Pro Ala Ala Ala Asp Leu Glu Pro Ser Val Ala Lys
           20           25           30
Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
           35           40           45
Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
           50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
           65           70           75           80
Trp Gly Leu Gly Ala Ser Gln Gly Gln His Glu Pro Leu Ala Arg Val
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Ser Asn Arg Pro
           100

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<210> 2579

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2579

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180
tgctggatac ccatttttgt agtgaaattt ctttcactgc ttcaggtaga aataccaggt
240
accataacct cttgggtagt gattttttatt ctgcccatta acagtgcctt gaacccaatt
300
ctctatactc tgaccacaag accatttaaa gaaatgattc atcggttttg gtataactac
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420

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<210> 2580

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2580

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Val Phe Ser Tyr Gly Ser Met Phe Tyr Ser Val His Gln Ser Ala Ile
           20           25           30
Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
           35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
           50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
           65           70           75           80
Thr Ile Thr Ser Trp Val Val Ile Phe Ile Leu Pro Ile Asn Ser Ala

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				85					90					95					
Leu	Asn	Pro	Ile	Leu	Tyr	Thr	Leu	Thr	Thr	Arg	Pro	Phe	Lys	Glu	Met				
			100					105					110						
Ile	His	Arg	Phe	Trp	Tyr	Asn	Tyr	Arg	Gln	Arg	Lys	Ser	Met	Asp	Ser				
		115				120						125							
Lys	Gly	Gln	Lys	Thr	Glu	Ala	Gly	Val	Cys	Ser	Arg								
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<210> 2581

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2581

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120
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459

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<210> 2582

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2582

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		20						25					30						
Gln	Thr	Thr	Val	Pro	Asp	Thr	Gln	Gln	Phe	Val	Tyr	Gln	Ala	His	Ser				
		35					40					45							
Leu	Asp	Lys	Ile	Glu	Ile	Ile	Gly	Arg	Ile	Leu	Gln	Ala	Asn	Asp	Val				
	50					55					60								
Glu	Lys	Val	Ile	Ile	Phe	Cys	Arg	Thr	Lys	Arg	Ala	Cys	Gln	Arg	Leu				
	65				70				75						80				
Ser	Asp	Asp	Leu	Asp	Asp	Arg	Gly	Phe	Lys	Thr	Arg	Ala	Ile	His	Gly				
			85					90					95						
Asp	Leu	Thr	Gln	Val	Ala	Arg	Glu	Lys	Ala	Leu	Lys	Lys	Phe	Arg	His				
		100					105						110						
Gly	Glu	Ala	Thr	Ile	Leu	Val	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Ile				
		115				120						125							
Asp	Val	Thr	Gly	Val	Ser	His	Val	Ile	Asn	His	Glu	Cys	Pro	Glu	Asp				

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 Glu Lys Thr Tyr Val His Arg Ile Gly
 145 150

<210> 2583
 <211> 7098
 <212> DNA
 <213> Homo sapiens

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<210> 2584

<211> 1186

<212> PRT

<213> Homo sapiens

<400> 2584

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			20				25						30		
Thr	Pro	Gly	Cys	Asp	Gly	Ser	Gly	His	Val	Ser	Gly	Lys	Tyr	Ala	Arg
		35				40					45				
His	Arg	Ser	Val	Tyr	Gly	Cys	Pro	Leu	Ala	Lys	Lys	Arg	Lys	Thr	Gln
	50				55					60					
Asp	Lys	Gln	Pro	Gln	Glu	Pro	Ala	Pro	Lys	Arg	Lys	Pro	Phe	Ala	Val
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Lys	Ala	Asp	Ser	Ser	Val	Asp	Glu	Cys	Asp	Asp	Ser	Asp	Gly	Thr	
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Glu	Asp	Met	Asp	Glu	Lys	Glu	Glu	Asp	Glu	Gly	Glu	Glu	Tyr	Ser	Glu
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		115					120					125				
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				165					170					175		
Asn	Thr	Arg	Ile	Met	Gln	Asp	Thr	Glu	Lys	Asp	Asp	Asn	Asn	Ser	Asp	
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Glu	Tyr	Asp	Asn	Tyr	Asp	Glu	Leu	Val	Ala	Lys	Ser	Leu	Leu	Asn	Leu	
		195					200					205				
Gly	Lys	Ile	Ala	Glu	Asp	Ala	Ala	Tyr	Arg	Ala	Arg	Thr	Glu	Ser	Glu	
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Glu	Asn	Leu	Gly	Arg	Lys	Ser	Glu	Leu	Ser	Leu	Asp	Leu	Asp	Ser	Asp	
				245					250					255		
Val	Val	Arg	Glu	Thr	Val	Asp	Ser	Leu	Lys	Leu	Leu	Ala	Gln	Gly	His	
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Gly	Val	Val	Leu	Ser	Glu	Asn	Met	Asn	Asp	Arg	Asn	Tyr	Ala	Asp	Ser	
		275					280					285				
Met	Ser	Gln	Gln	Asp	Ser	Arg	Asn	Met	Asn	Tyr	Val	Met	Leu	Gly	Lys	
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Pro	Met	Asn	Asn	Gly	Leu	Met	Glu	Lys	Met	Val	Glu	Glu	Ser	Asp	Glu	
305					310					315					320	
Glu	Val	Cys	Leu	Ser	Ser	Leu	Glu	Cys	Leu	Arg	Asn	Gln	Cys	Phe	Asp	
				325					330					335		
Leu	Ala	Arg	Lys	Leu	Ser	Glu	Thr	Asn	Pro	Gln	Glu	Arg	Asn	Pro	Gln	
			340					345					350			
Gln	Asn	Met	Asn	Ile	Arg	Gln	His	Val	Arg	Pro	Glu	Glu	Asp	Phe	Pro	
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Gly	Arg	Thr	Pro	Asp	Arg	Asn	Tyr	Ser	Asp	Met	Leu	Asn	Leu	Met	Arg	
	370					375					380					
Leu	Glu	Glu	Gln	Leu	Ser	Pro	Arg	Ser	Arg	Val	Phe	Ala	Ser	Cys	Ala	
385					390					395					400	
Lys	Glu	Asp	Gly	Cys	His	Glu	Arg	Asp	Asp	Asp	Thr	Thr	Ser	Val	Asn	
				405					410					415		
Ser	Asp	Arg	Ser	Glu	Glu	Val	Phe	Asp	Met	Thr	Lys	Gly	Asn	Leu	Thr	
			420					425					430			
Leu	Leu	Glu	Lys	Ala	Ile	Ala	Leu	Glu	Thr	Glu	Arg	Ala	Lys	Ala	Met	
		435				440						445				
Arg	Glu	Lys	Met	Ala	Met	Glu	Ala	Gly	Arg	Arg	Asp	Asn	Met	Arg	Ser	
	450					455					460					
Tyr	Glu	Asp	Gln	Ser	Pro	Arg	Gln	Leu	Pro	Gly	Glu	Asp	Arg	Lys	Pro	
465					470		</									

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 Ala Ala Ala Glu Lys Leu Ala Lys Ala Gln Glu Lys His Gln Ser Cys
 580 585 590
 Asp Val Ser Lys Ser Ser Gln Ala Ser Asp Arg Val Leu Arg Pro Met
 595 600 605
 Cys Phe Val Lys Gln Leu Glu Ile Pro Gln Tyr Gly Tyr Arg Asn Asn
 610 615 620
 Val Pro Thr Thr Thr Pro Arg Ser Asn Leu Ala Lys Glu Leu Glu Lys
 625 630 635 640
 Tyr Ser Lys Thr Ser Phe Glu Tyr Asn Ser Tyr Asp Asn His Thr Tyr
 645 650 655
 Gly Lys Arg Ala Ile Ala Pro Lys Val Gln Thr Arg Asp Ile Ser Pro
 660 665 670
 Lys Gly Tyr Asp Asp Ala Lys Arg Tyr Cys Lys Asp Pro Ser Pro Ser
 675 680 685
 Ser Ser Ser Thr Ser Ser Tyr Ala Pro Ser Ser Ser Ser Asn Leu Ser
 690 695 700
 Cys Gly Gly Gly Ser Ser Ala Ser Ser Thr Cys Ser Lys Ser Ser Phe
 705 710 715 720
 Asp Tyr Thr His Asp Met Glu Ala Ala His Met Ala Ala Thr Ala Ile
 725 730 735
 Leu Asn Leu Ser Thr Arg Cys Arg Glu Met Pro Gln Asn Leu Ser Thr
 740 745 750
 Lys Pro Gln Asp Leu Cys Ala Thr Arg Asn Pro Asp Met Glu Val Asp
 755 760 765
 Glu Asn Gly Thr Leu Asp Leu Ser Met Asn Lys Gln Arg Pro Arg Asp
 770 775 780
 Ser Cys Cys Pro Ile Leu Thr Pro Leu Glu Pro Met Ser Pro Gln Gln
 785 790 795 800
 Gln Ala Val Met Asn Asn Arg Cys Phe Gln Leu Gly Glu Gly Asp Cys
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 Trp Asp Leu Pro Val Asp Tyr Thr Lys Met Lys Pro Arg Arg Ile Asp
 820 825 830
 Glu Asp Glu Ser Lys Asp Ile Thr Pro Glu Asp Leu Asp Pro Phe Gln
 835 840 845
 Glu Ala Leu Glu Glu Arg Arg Tyr Pro Gly Glu Val Thr Ile Pro Ser
 850 855 860
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 Ala Thr Ser Ser Gln Glu Leu Lys Cys Pro Thr Pro Gly Cys Asp Gly
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 Cys Pro Arg Ala Lys Lys Ser Gly Ile Arg Ile Ala Gln Ser Lys Glu
 930 935 940
 Asp Lys Glu Asp Gln Glu Pro Ile Arg Cys Pro Val Pro Gly Cys Asp
 945 950 955 960
 Gly Gln Gly His Ile Thr Gly Lys Tyr Ala Ser His Arg Ser Ala Ser
 965 970 975
 Gly Cys Pro Leu Ala Ala Lys Arg Gln Lys Asp Gly Tyr Leu Asn Gly

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 995 1000 1005
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 1060 1065 1070
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
 1075 1080 1085
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
 1090 1095 1100
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
 1105 1110 1115 1120
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
 1125 1130 1135
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
 1140 1145 1150
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
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<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

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 240
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 542

<210> 2586
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2586
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 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
 35 40 45
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
 50 55 60
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val
 65 70 75 80
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
 85 90 95
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
 100 105 110
 Gln Ala Leu Leu Asn Val Leu Ala Leu
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<210> 2587
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2587
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 120
 gatgccggct acccgccgct ggtcacccccg tcgtcccaga tcgtgggaac ccaggcggtg
 180
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 240
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 300
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag
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 420
 gttcttacca acgcg
 435

<210> 2588
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2588
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

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Ser  Gln  Leu  Glu  Ala  Gln  Gly  Ala  Gly  Asp  Arg  Met  Asp  Glu  Val  Met
      20           25           30
Lys  Glu  Val  Pro  Arg  Val  Arg  Lys  Asp  Ala  Gly  Tyr  Pro  Pro  Leu  Val
      35           40           45
Thr  Pro  Ser  Ser  Gln  Ile  Val  Gly  Thr  Gln  Ala  Val  Phe  Asn  Val  Leu
      50           55           60
Met  Gly  Asn  Gly  Ser  Tyr  Lys  Asn  Leu  Thr  Ala  Glu  Phe  Ala  Asp  Leu
      65           70           75           80
Met  Leu  Gly  Tyr  Tyr  Gly  Lys  Pro  Ile  Gly  Glu  Leu  Asn  Pro  Glu  Ile
      85           90           95
Val  Glu  Met  Ala  Lys  Lys  Gln  Thr  Gly  Lys  Glu  Pro  Ile  Asp  Cys  Arg
      100          105          110
Pro  Ala  Asp  Leu  Leu  Glu  Pro  Glu  Trp  Asp  Gln  Leu  Val  Glu  Gln  Ala
      115          120          125
Lys  Ser  Leu  Glu  Gly  Phe  Asp  Gly  Ser  Asp  Glu  Asp  Val  Leu  Thr  Asn
      130          135          140
Ala
145

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<210> 2589
 <211> 366
 <212> DNA
 <213> Homo sapiens

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<400> 2589
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120
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240
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366

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<210> 2590
 <211> 122
 <212> PRT
 <213> Homo sapiens

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<400> 2590
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Asp  Pro  Thr  Ala  Gly  Asp  Pro  Val  Glu  Gln  Ile  Arg  Ala  Leu  Thr  Arg
      20           25           30
Gly  Arg  Gly  Val  Asp  Phe  Ala  Ile  Glu  Val  Val  Gly  Ile  Val  Glu  Val
      35           40           45
Met  Glu  Gln  Ala  Tyr  Trp  Ala  Ala  Arg  Arg  Gly  Gly  Thr  Ile  Val  Tyr

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      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100             105             110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
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<210> 2591

<211> 341

<212> DNA

<213> Homo sapiens

<400> 2591

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120
tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag gggtgaggtt acatgaggga
300
gaggggtcag ttggtgcatt cacagaacag cagggtggcc a
341

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<210> 2592

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2592

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      20              25              30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35              40              45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50              55              60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65              70              75              80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85              90              95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100             105

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<210> 2593

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2593

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 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatac tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

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			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35				40					45				
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55					60				
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65				70					75					80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85					90						95	
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
		100						105				110			
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
	115						120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
	130				135						140				
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
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Ala	Glu	Met	Ser	Leu	Lys	Leu									
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<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595
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 120
 gtcacaatctt ctggggctca ctcatataac accaacaacat gggatatttg tgaagaactt
 180
 cgctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtggtcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg
 300
 aacagtgcgg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaacagaa acagagtctg ccacttcaga aggaggcatt agaagctaata
 420
 gttaccagg atctgaagct tcttggtctt gtagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caaggtgtgg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tggttctgga
 660
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa tttcagcttt gcaggtgcat ttggatgaat tccaaaaaat cttatggaag
 780
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596

<211> 309

<212> PRT

<213> Homo sapiens

<400> 2596
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
 1 5 10 15
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
 20 25 30
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
 35 40 45
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
 50 55 60
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
 65 70 75 80
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
 85 90 95
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

ccatgggttg	gaatgcaaga	gacacactct	agacttacta	gaggagcaag	agcaggactt
60					
ggctgcacct	gcagctgagg	gttagcagga	attaggagat	aacagtagaa	tagggctaga
120					
ctgaaaaggc	ctttgatgcc	aggttaggaa	atttacattt	tatccacaaa	atccaaatcc
180					
tcctttaata	atgagatgtc	tttacaagtt	tttgggcaag	agtggtatgg	ctgacctggt
240					
gtcctgggaa	ggaactgtgt	ggggatgggtg	tgcaggactt	acctaggggtg	ggaaaggcac
300					
aagcagcatg	gggctgtggc	agctaccaga	ggtaaaggga	catttcaggg	aaagacttgg
360					
caggacaaga	ccttccttgg	atggatggat	gaataccaga	aacagggacc	caagagaaaag
420					
gccgagtttc	atagggagag	aagatgggtc	atgtatgagg	catggtgagc	ttgtactgat
480					
ggtgagacgt	ccagtcgaca	gtactaccca	ctggccagtg	agaaatgtgg	gaccaggggtt
540					
caggaggaaa	ctggggccgg	aaatgagcat	ttggaaggcg	ccaggggtgga	agcgggtggt
600					

tcactccacg agtgctattt cacttacgcg t
631

<210> 2598
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2598
Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
1 5 10 15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
20 25 30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
35 40 45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
50 55 60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
65 70 75 80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
85 90 95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100 105

<210> 2599
<211> 356
<212> DNA
<213> Homo sapiens

<400> 2599
nagatcttat acagggacgt gatgttggag aactactgga accttggttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctctaaatg tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttgga agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccagaa aaatgtgcat gattttgagt gtcaatggag agatgn
356

<210> 2600
<211> 118
<212> PRT
<213> Homo sapiens

<400> 2600
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
1 5 10 15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
20 25 30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg

```

      35              40              45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
      50              55              60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
65              70              75              80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85              90              95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100              105              110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2601

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gcgccgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
60
tacttgtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cgggtggtggg
120
gtcaccgcct tcggcttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
180
ttgatgcct tgcccgaaga cctcggtatc cgccgcaccg acgccaccg cgaactgttg
240
gccgccaaga gcgtggccga cctggtggag tgggccggtg gcttgtgcaa cccgcccgcc
300
aagttcagga gctggtaaat gcgcgcct
329

```

<210> 2602

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2602

```

Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
1              5              10              15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20              25              30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35              40              45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50              55              60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
65              70              75              80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85              90              95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100              105

```

<210> 2603

<211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gccaggtcg gtggtcagga
 60
 gcatcggttc ggtggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
 120
 gggttggtgta agtggtcagg tgggccacga tctgggcact gatcacctcg gtgaaatcga
 180
 agctctgggt accctgagcg gtcgccgaca cgacacggtc cacaccggag accagaccga
 240
 tctcggagat gatcgcgtaa ccttcattgt cgtagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccatcggggg gttggccgac agatactgac
 360
 cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttggtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5					10					15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
		35				40					45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
	50					55					60				
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65				70					75				80		
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85					90					95		
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggagggag ggcattgtcaa aagcgactgt atccagaggg tttgatttaa acattttttca
 60
 aaacatatgt ggcaaacagc gggggggaggg gatctcacca acgtttttct ccacttcttc
 120
 tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aagggaggaa
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aagggtgccc
 240
 caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat
 300
 ggggcaccca ggactctagg gagagaggca cggtctcaca aaggcccttt gage
 354

<210> 2606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2606

Met	Ser	Lys	Ala	Thr	Val	Ser	Arg	Gly	Phe	Asp	Leu	Asn	Ile	Phe	Gln
1				5					10					15	
Asn	Ile	Cys	Gly	Lys	Gln	Arg	Gly	Glu	Gly	Ile	Ser	Pro	Thr	Phe	Phe
			20					25					30		
Ser	Thr	Ser	Ser	Leu	His	Ala	Gly	Thr	Cys	Ser	Thr	Phe	Lys	Met	Cys
		35					40					45			
His	Phe	Gly	Arg	Lys	Gly	Arg	Asn	Asn	Tyr	Leu	Lys	Gly	Ile	His	Val
	50					55					60				
Ser	Met	Ser	Pro	Phe	Ser	Ser	Ala	Glu	Gly	Cys	Pro	Lys	Val	Pro	Pro
65					70					75				80	
Leu	Arg	Arg	Glu	Lys	Gly	Glu	Arg	Arg	Arg	Asp	Ser	Phe	His	Gln	Met
				85					90					95	
Gly	His	Pro	Gly	Leu											
				100											

<210> 2607

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2607

tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg
 60
 tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccag gccggaatgg
 120
 atgacatgga cagaacccccg tcggaaaaaa gccggaatgt gcaaacccaa attcccacca
 180
 cacggggggcc ctaacaattg gatccatccc cnaaaaaaanc cntnncaaaa aaagntaaaa
 240
 actttttttt ttttaaan nn anacccccaa aaaaaccaaa aaaaaaaatt taaaaaa
 297

<210> 2608

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2608

Met	Ile	Arg	Tyr	Pro	Asn	Gln	Gln	Arg	Lys	Gln	Arg	Lys	Leu	Leu	Leu
1				5					10				15		
Phe	Leu	Cys	Cys	Phe	Phe	Phe	Leu	Arg	Thr	Asp	Leu	Ala	Pro	Ala	Pro

```

      20      25      30
Arg Pro Glu Trp Met Thr Trp Thr Glu Pro Arg Arg Lys Lys Ala Gly
      35      40      45
Met Cys Lys Pro Lys Phe Pro Pro His Gly Gly Pro Asn Asn Trp Ile
      50      55      60
His Pro Xaa Lys Xaa Pro Xaa Gln Lys Lys Xaa Lys Thr Phe Phe Phe
65      70      75      80
Leu Xaa Xaa Xaa Pro Gln Lys Asn Gln Lys Lys Lys Phe Lys Lys
      85      90      95

```

<210> 2609

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2609

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nccgcatcgg catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacacgtc cctgacgata cctatccgct catctggaga cccatgcggt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acacccccccc ctgcgcatctg
180
tgaaagttct acctcggggg cgctcatctcg gctgtcatcg tcggcaaate actcagctgg
240
ccgtaccctt cgctcatgcc cggggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

```

<210> 2610

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2610

```

Met Met Ser Gly Lys Asp Asp Pro Gly Met Ala Lys Val Tyr Gly Phe
1      5      10      15
Val Asp Thr Ser Leu Thr Ile Pro Ile Arg Ser Ser Gly Asp Pro Cys
20      25      30
Val Pro Trp Thr Pro Ile Ala Tyr Glu Lys Ile Phe Phe Phe Pro Pro
35      40      45
Lys Lys His Pro Pro Leu Ala Ser Val Lys Val Leu Pro Arg Gly Arg
50      55      60
His Leu Gly Cys His Arg Arg Gln Ile Thr Gln Leu Ala Val Pro Phe
65      70      75      80
Val Ile Ala Arg Ala Thr Asp Leu Asp Gly Xaa Ala Cys Thr Ala Thr
85      90      95
Thr Thr

```

<210> 2611

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2611
 gccgccgcga tcgacggcga ctctctgacc agctgggtgt ccagctcgct gcaaaccgct
 60
 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcacctg
 120
 acgcccagcg ccaccgctgt cggagctcag gtgcgcgcg tcgaggtggc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccttac
 240
 ggcgagacct catgggtccg gttcaccgcg accggcaccg acgacggctc ccccggcgtg
 300
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2612
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
 1 5 10 15
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
 20 25 30
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
 35 40 45
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
 50 55 60
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
 65 70 75 80
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
 85 90 95
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
 100 105 110
 Asp Ala

<210> 2613
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 2613
 acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggcctgggcc ctgggcatca
 60
 ttctctcct ccaaaagggtg agggctctgac ctaatggtac tttgtctgat gttttccaga
 120
 tatgccccta ctgggaagggt ccaagtgggc aggcagagtc tgggggtggag cgaggtgggg
 180
 ctgggaagca ctctgcttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
 240
 ctctcctgg gaggaggaaa ggagggtcgt cctccaggtc tcaggctgag ggagtgggct
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
360
ctggggccccc tcccaggctc tcctcgtggc aggcagggac ttgggccagc atgg
414

<210> 2614
<211> 107
<212> PRT
<213> Homo sapiens

<400> 2614
Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
1 5 10 15
Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
20 25 30
Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
35 40 45
Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
50 55 60
Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
65 70 75 80
Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
85 90 95
Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp
100 105

<210> 2615
<211> 394
<212> DNA
<213> Homo sapiens

<400> 2615
nnngccgccc ccctcggccc cagcgcgctt cttttgcgcn ncgacgtcag ccagaaggcg
60
gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga tctcctcgtc
120
aacaatgcgg gcgtcacgca tgcggccgat ttctcgcgac tgtgcgaaga cgatttcgac
180
cgggtcatgc gcattaacct gaaatcgatg ttctgtgctg gccaggccgc ggcgcgcgag
240
atgggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
300
attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
360
atggccttga acctggcgcc gcacggtgctg cgct
394

<210> 2616
<211> 131
<212> PRT
<213> Homo sapiens

<400> 2616
Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val


```

      1             5             10             15
Ser  Gln  Lys  Ala  Asp  Val  Asp  Ala  Met  Leu  Lys  Glu  Thr  Leu  Ala  Gln
      20             25             30
Phe  Gly  His  Ile  Asp  Ile  Leu  Val  Asn  Asn  Ala  Gly  Val  Thr  His  Ala
      35             40             45
Ala  Asp  Phe  Leu  Asp  Val  Cys  Glu  Asp  Asp  Phe  Asp  Arg  Val  Met  Arg
      50             55             60
Ile  Asn  Leu  Lys  Ser  Met  Phe  Leu  Cys  Gly  Gln  Ala  Ala  Ala  Arg  Glu
      65             70             75             80
Met  Val  Lys  Arg  Asn  Ser  Gly  Cys  Ile  Ile  Asn  Met  Ser  Ser  Val  Asn
      85             90             95
Ala  Glu  Leu  Ala  Ile  Pro  Asn  Gln  Val  Pro  Tyr  Val  Val  Ser  Lys  Gly
      100            105            110
Ala  Ile  Asn  Gln  Leu  Thr  Lys  Val  Met  Ala  Leu  Asn  Leu  Ala  Pro  His
      115            120            125
Gly  Ala  Arg
      130

```

<210> 2617

<211> 513

<212> DNA

<213> Homo sapiens

<400> 2617

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naccggttg catcatgctc acagcactgg ggggtccctt cttctttttc ctccctcagaa
60
agacattgtg agatgggaaa tatcatggaa acacctatac ttcccggtc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctccg tatcattcca agcgggagtt
180
atgcacgcca tacttggccc caacgggttct gggaagacca ccctgggtacg cacgttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tcgcatacct gtatcgcgcg tegtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctaccg tacgtcacct cggttggtac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgccc atcgacgcgt caccactctc tca
513

```

<210> 2618

<211> 171

<212> PRT

<213> Homo sapiens

<400> 2618

```

Xaa Arg Leu Ala Ser Cys Ser Gln His Trp Gly Phe Pro Ser Phe Phe
  1             5             10             15
Ser Ser Ser Glu Arg His Cys Glu Met Gly Asn Ile Met Glu Thr Pro
      20             25             30
Ile Leu Ser Gly Ser His Leu Asn Val Thr Leu Gly Asn His Lys Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
   50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65              70              75              80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
              85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
              100              105              110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
              115              120              125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
              130              135              140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
 145              150              155              160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
              165              170

```

<210> 2619
 <211> 348
 <212> DNA
 <213> Homo sapiens

```

<400> 2619
nnaaatcttcg acgaccttga ggttttcttc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttccttga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggg ttacgagcgg
240
gcggggcggc acccttacgg ctcggtgtac cccggggccga ttggtgcggg gctcaatccg
300
cagctgcggg gcgtggagca tcccgtcgat cgtggtctgc catacgcg
348

```

<210> 2620
 <211> 116
 <212> PRT
 <213> Homo sapiens

```

<400> 2620
Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
 1              5              10              15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
              20              25              30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
              35              40              45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
              50              55              60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
 65              70              75              80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

				85					90					95				
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly			
			100					105					110					
Leu	Pro	Tyr	Ala															
			115															

<210> 2621

<211> 1485

<212> DNA

<213> Homo sapiens

<400> 2621

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acgcgtgcag gtaaaccaga ggccgtgtga ccagctcagt gctggtttac ggaacaactc
60
ttacttttaa aaattacttg ttcccccaaa ttgttgagtg ccgccgtttg gtttcctatg
120
ttttctttcc ctgttttgat tttgctgaag ggagagggtgg tgggtggttag gatcagagct
180
ctcctggcat ccgtggggag gatttgctgg tgggtggcttc gggctcatgc ccagacacac
240
tcaactgcccc gtctgtccaa ggccctccct tcccctttgc tgggtgggagg agctcgtgtg
300
ctccttggcc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg
360
aagggttagg aggggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg
420
tttcagcctc agttggttgc accgttagcc cctctcctcc cggatgggtca tgtttttgtc
480
acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttggaa
540
atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgtgtgcc
600
tgcagttgtc attgtcttct ccaccgggct gttcccattt atttcctgtg gaactgaatc
660
cctcctccct ccaactcctg ggagcccagg tggtccttgg ccaccattca ggctttccaa
720
gaagccaacc accttggaga ttttttttct tgaatttcgc tgttttcttc tgcttccttt
780
agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaattc
840
catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgttaggaat
900
tggtcaaaaat tcatctcttt ctttaagccc atcaactccc aggacggttt gagttactca
960
gttacctaag cttgctattc atccaaatca ttttctagag tcaactgtata agggctctatg
1020
agtagctgtg tatgaataaa tattacctgt ctacctcaa atacacatac tgctgaagca
1080
ttctgtacaa ccgtgtgtta tcacagtgc gttttaagtg taacngttga acttaggcat
1140
tttcctgtgt ggcggaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa
1200
attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatattg
1260

```

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt
1320
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<213> Homo sapiens

<400> 2622

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Asp	Met	Thr	Phe	Lys	Lys	Glu	Pro	Ala	Ala	Ser	Ala	Ala	Ala	Phe	Pro		
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65 70 75 80
Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
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Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
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Asp Cys Thr Cys Ile Ser Thr Ala Glu Leu Phe Ile Cys Asp Ser Ala
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<213> Homo sapiens

<400> 2629

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<212> PRT

<213> Homo sapiens

<400> 2630

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<212> PRT

<213> Homo sapiens

<400> 2632

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<212> PRT

<213> Homo sapiens

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 Asn Glu Cys Gly Lys Thr Phe Arg Gln Ser Ser Cys Leu Ser Lys His
 705 710 715 720
 Gln Arg Ile His Ser Gly Glu Lys Pro Tyr Val Cys Asp Tyr Cys Gly
 725 730 735
 Lys Ala Phe Gly Leu Ser Ala Glu Leu Val Arg His Gln Arg Ile His
 740 745 750
 Thr Gly Glu Lys Pro Tyr Val Cys Gln Glu Cys Gly Lys Ala Phe Thr
 755 760 765
 Gln Ser Ser Cys Leu Ser Ile His Arg Arg Val His Thr Gly Glu Lys
 770 775 780
 Pro Tyr Arg Cys Gly Glu Cys Gly Lys Ala Phe Ala Gln Lys Ala Asn

785		790		795		800
Leu Thr Gln His Gln Arg Ile His Thr Gly Glu Lys Pro Tyr Ser Cys						
		805		810		815
Asn Val Cys Gly Lys Ala Phe Val Leu Ser Ala His Leu Asn Gln His						
		820		825		830
Leu Arg Val His Thr Gln Glu Thr Leu Tyr Gln Cys Gln Arg Cys Gln						
		835		840		845
Lys Ala Phe Arg Cys His Ser Ser Leu Ser Arg His Gln Arg Val His						
		850		855		860
Asn Lys Gln Gln Tyr Cys Leu						
865		870				

<210> 2645

<211> 1018

<212> DNA

<213> Homo sapiens

<400> 2645

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<210> 2646

<211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2646
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 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Ile Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
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 180 185 190
 Ser Gly Ser His Lys Arg Ser
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<210> 2647
 <211> 1368
 <212> DNA
 <213> Homo sapiens

<400> 2647
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 240
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 360
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 420
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 480

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 720
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 780
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<210> 2648

<211> 389

<212> PRT

<213> Homo sapiens

<400> 2648

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Lys	Leu	Phe	Pro	His	Val	Thr	Pro	Lys	Gly	Ile	Asn	Gly	Ile	Asp	Phe
		20					25				30				
Lys	Gly	Glu	Ala	Ile	Thr	Phe	Lys	Ala	Thr	Thr	Ala	Gly	Ile	Leu	Ala
	35					40					45				
Thr	Leu	Ser	His	Cys	Ile	Glu	Leu	Met	Val	Lys	Arg	Glu	Asp	Ser	Trp
	50				55					60					
Gln	Lys	Arg	Leu	Asp	Lys	Glu	Thr	Glu	Lys	Lys	Arg	Arg	Thr	Glu	Glu
65				70				75						80	
Ala	Tyr	Lys	Asn	Ala	Met	Thr	Glu	Leu	Lys	Lys	Lys	Ser	His	Phe	Gly
			85					90						95	
Gly	Pro	Asp	Tyr	Glu	Glu	Gly	Pro	Asn	Ser	Leu	Ile	Asn	Glu	Glu	Glu
		100					105					110			
Phe	Phe	Asp	Ala	Val	Glu	Ala	Ala	Leu	Asp	Arg	Gln	Asp	Lys	Ile	Glu
	115					120					125				
Glu	Gln	Ser	Gln	Ser	Glu	Lys	Val	Arg	Leu	His	Trp	Pro	Thr	Ser	Leu

130 135 140
 Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val Gln
 145 150 155 160
 Lys Val Glu Glu Met Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp
 165 170 175
 Val Gly Gly Asp Ala Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met
 180 185 190
 Lys Val Tyr Arg Arg Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro
 195 200 205
 Leu Lys Ala Thr His Ala Val Lys Gly Val Thr Gly His Glu Val Cys
 210 215 220
 Asn Tyr Phe Trp Asn Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile
 225 230 235 240
 Glu Asn Phe His Val Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile
 245 250 255
 Tyr Gln Thr His Lys Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu
 260 265 270
 Tyr Leu Ser Val Ile Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro
 275 280 285
 Glu Thr Trp Ile Val Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro
 290 295 300
 Leu Asn Asn Arg Cys Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys
 305 310 315 320
 Gln Thr Leu Val Ser Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp
 325 330 335
 Asn Ile Leu Cys Lys Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly
 340 345 350
 Trp Ala Pro Ala Ser Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro
 355 360 365
 Lys Phe Leu Lys Arg Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly
 370 375 380
 Lys Pro Ile Leu Phe
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<210> 2649
 <211> 1299
 <212> DNA
 <213> Homo sapiens

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 240
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 aatgatgtca agcaccatgg ccagttttat gaatggcttc ctgtgtctaa tgacctgac
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 aacctatgtt cactcaagtg ccaagccaaa ggaacaaccc tggttgttga actagcacct
 420

aaggctcttag atggtacgcg ttgctataca gaatctttgg atatgtgcat cagtgggttta
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660
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1020
tactgtcact attaccaga gaacatcaaa cccaaacca agcttcagga gtgcaacttg
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1200
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<210> 2650

<211> 428

<212> PRT

<213> Homo sapiens

<400> 2650

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			20					25					30		
Glu	Glu	Asp	Arg	Asp	Gly	Leu	Trp	Asp	Ala	Trp	Gly	Pro	Trp	Ser	Glu
		35					40					45			
Cys	Ser	Arg	Thr	Cys	Gly	Gly	Gly	Ala	Ser	Tyr	Ser	Leu	Arg	Arg	Cys
	50					55					60				
Leu	Ser	Ser	Lys	Ser	Cys	Glu	Gly	Arg	Asn	Ile	Arg	Tyr	Arg	Thr	Cys
65					70				75					80	
Ser	Asn	Val	Asp	Cys	Pro	Pro	Glu	Ala	Gly	Asp	Phe	Arg	Ala	Gln	Gln
			85					90						95	
Cys	Ser	Ala	His	Asn	Asp	Val	Lys	His	His	Gly	Gln	Phe	Tyr	Glu	Trp
			100				105					110			
Leu	Pro	Val	Ser	Asn	Asp	Pro	Asp	Asn	Pro	Cys	Ser	Leu	Lys	Cys	Gln
		115				120						125			
Ala	Lys	Gly	Thr	Thr	Leu	Val	Val	Glu	Leu	Ala	Pro	Lys	Val	Leu	Asp

130 135 140
 Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser Gly Leu
 145 150 155 160
 Cys Gln Ile Val Gly Cys Asp His Gln Leu Gly Ser Thr Val Lys Glu
 165 170 175
 Asp Asn Cys Gly Val Cys Asn Gly Asp Gly Ser Thr Cys Arg Leu Val
 180 185 190
 Arg Gly Gln Tyr Lys Ser Gln Leu Ser Ala Thr Lys Ser Asp Asp Thr
 195 200 205
 Val Val Ala Ile Pro Tyr Gly Ser Arg His Ile Arg Leu Val Leu Lys
 210 215 220
 Gly Pro Asp His Leu Tyr Leu Glu Thr Lys Thr Leu Gln Gly Thr Lys
 225 230 235 240
 Gly Glu Asn Ser Leu Ser Ser Thr Gly Thr Phe Leu Val Asp Asn Ser
 245 250 255
 Ser Val Asp Phe Gln Lys Phe Pro Asp Lys Glu Ile Leu Arg Met Ala
 260 265 270
 Gly Pro Leu Thr Ala Asp Phe Ile Val Lys Ile Arg Asn Ser Gly Ser
 275 280 285
 Ala Asp Ser Thr Val Gln Phe Ile Phe Tyr Gln Pro Ile Ile His Arg
 290 295 300
 Trp Arg Glu Thr Asp Phe Phe Pro Cys Ser Ala Thr Cys Gly Gly Gly
 305 310 315 320
 Tyr Gln Leu Thr Ser Ala Glu Cys Tyr Asp Leu Arg Ser Asn Arg Val
 325 330 335
 Val Ala Asp Gln Tyr Cys His Tyr Tyr Pro Glu Asn Ile Lys Pro Lys
 340 345 350
 Pro Lys Leu Gln Glu Cys Asn Leu Asp Pro Cys Pro Ala Ser Asp Gly
 355 360 365
 Tyr Lys Gln Ile Met Pro Tyr Asp Leu Tyr His Pro Leu Pro Arg Trp
 370 375 380
 Glu Ala Thr Pro Trp Thr Ala Cys Ser Ser Ser Cys Gly Gly Gly Ile
 385 390 395 400
 Gln Ser Pro Gly Ser Phe Leu Cys Gly Gly Gly His Pro Gly Ala Cys
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 His Phe Ser Gly Arg Val Glu Met His Val His Pro
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<210> 2651
 <211> 628
 <212> DNA
 <213> Homo sapiens

<400> 2651
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 120
 gagacaggcc gaggtagcaa gacaaaggac gggcatgagg ttcggacctg caaagtggcg
 180
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<210> 2652

<211> 209

<212> PRT

<213> Homo sapiens

<400> 2652

Tyr	Thr	Val	Leu	Pro	Ala	Gly	Leu	Val	Gly	Cys	Arg	Gly	Ser	Gly	Ser
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Met	Thr	Thr	Glu	Thr	Phe	Val	Lys	Gly	Ile	Lys	Pro	Gly	Leu	Lys	Asn
			20					25					30		
Leu	Asn	Leu	Ile	Phe	Ile	Val	Leu	Glu	Thr	Gly	Arg	Val	Thr	Lys	Thr
		35					40					45			
Lys	Asp	Gly	His	Glu	Val	Arg	Thr	Cys	Lys	Val	Ala	Asp	Lys	Thr	Gly
	50					55				60					
Ser	Ile	Asn	Ile	Ser	Val	Trp	Asp	Asp	Val	Gly	Asn	Leu	Ile	Gln	Pro
65					70					75					80
Gly	Asp	Ile	Ile	Arg	Leu	Thr	Lys	Gly	Tyr	Ala	Ser	Val	Phe	Lys	Gly
				85					90					95	
Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
		130				135					140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155					160
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
			165					170						175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
		180						185					190		
Ala	Pro	Glu	Ser	Leu	Glu	Ala	Ser	Pro	Thr	Thr	His	Leu	Gln	Ala	Arg
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Leu

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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1140
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1440
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1620

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 1740
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 1860
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 1920
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 1980
 aactgagtt ctgattctaa atgccttctt ctgctgggcg cgggtggctca tgcctgtaat
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 2100
 ggc
 2103

<210> 2654
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 2654
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 Ser Asp Ser Lys Cys Leu Leu Leu Leu Gly Ala Val Ala His Ala Cys
 35 40 45
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly
 50 55 60
 Asp Arg Asp Tyr Pro Gly
 65 70

<210> 2655
 <211> 1752
 <212> DNA
 <213> Homo sapiens

<400> 2655
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 120
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 180
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 240
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 300
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 360

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420
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480
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600
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660
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720
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780
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900
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960
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1080
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1140
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1200
caggattttc agtttgcct acagcagtgt accactgttg tactttctgc ctgagcgtg
1260
cttcccagggt cctataaggc aaagtaggtc ttcgatgtaa ggtaggtctg cgatggggag
1320
gacttaatag agaagtcatt attttcgata gaaaagcatt acactgaggc atcagaagac
1380
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1440
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1500
ctagaagttt tctttcccat tcttctattt ccttttgact agcttcttct gcttcttttc
1560
tttctgtc ccgaagccta aagaaattta acaaattata ctattattat tcagagggta
1620
ccataaaatg ataaatttta agtatattta tctttagtca aaaaggcaat caactgtcct
1680
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1740
gtgatgcaat ct
1752

<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656

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Met Glu Thr Met Trp Glu Ile Pro Ala Ile Gly His Phe Leu Cys Leu
 1      5      10      15
Ala Gln Gln Ile Leu Asn Leu Pro Glu Ile Val Phe Tyr Glu Leu Glu
      20      25      30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
      35      40      45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
      50      55      60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
65      70      75      80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
      85      90      95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
      100      105      110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
      115      120      125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
      130      135      140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
145      150      155      160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
      165      170      175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
      180      185      190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
      195      200      205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
      210      215      220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
225      230      235      240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
      245      250      255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
      260      265      270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
      275      280      285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
      290      295      300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
305      310      315      320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
      325      330      335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
      340      345      350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
      355      360      365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
      370      375      380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
385      390      395      400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
      405      410      415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

```

	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435					440					445				
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450					455					460				
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
	465				470					475				480	
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
			485						490						

<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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120
gtcctgttgt ctaagggccca aggggcagta gcccctctc caggggccc gagcacagag
180
gcgtcagatc agagttgccca tcttcaactt gatatgcccc ccacatccca gcagctctgt
240
gggcccaggc tactggcatc cacatgactc ccagggcctg agtccacact gcctgaggac
300
aggagcctca aaactgaaat gcacgtgctt cggaccagcc atccgtgcct gacaatgtcc
360
tatggaaaca cccacacgtg tgcagatcgc tgcaatgaaa gggtcctgca tgggggttggg
420
taattccagc tgggaccgcc taggagcgcc atgcagctgt gggaacaagg ttgctgtcca
480
cacagacatg aagggtattcc ccgtggaatg aggttagaaa aggaagggca agagtggacg
540
tataagatgc cccatgctgt gtgaaaactg ccatgagaga gagacggagg aagggggaga
600
aagtgggaga cagagaccaa catctgcact gcctgtgcct gccacactct cccctcgagg
660
ccagaggggtg gcctctgggg aggggctggc gagaggggat gccaggcctg ggctgcagca
720
gacttgggtg gtcattggagg atccatgccca tcaacggcag gctgggggtgc cctccccggg
780
ccagcaccaa gcatgcatgg ttggtgatgt ggaacttacg cagagcgtgg cggctgggca
840
ggcggctgtg caggggctgg gcatggatat acagggctcg gtagaactcc tggcagtcct
900
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960
tgggggttcg ga
972

```

<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Glu Arg Asp Gly Gly Arg Gly Arg Lys Trp Glu Thr Glu Thr Asn Ile
 1           5           10           15
Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
          20          25          30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
        35        40        45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50      55      60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65          70          75

```

<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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actagtgaag gaaacggaag caagatttcc agatgtagca aatgggttta ttacggaaat
60
aattcatttt aagaattatt atgatctgaa tgtgaggctg aagaggaaca gaaaagaaag
120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagaggggtgg aggcctctcc gagggccgtt ccgcagaacc tgccacagcc acagatgcc
240
ccctatgcct tcgcgcaccc acccttcccc ctgcctcccg tgcggcctgt gttcaacaac
300
ttccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
360
gtcaactatg acttcgggtcc catccacatg cccctggagc acaacctgcc catgcacttt
420
ggccccccagc cgcggcatcg cttctgatgg ccccgaaatcc ccattgagca gcacaaagcc
480
cgtttgggggt aggagtgtgg atggagaacc ctcccccaag gctgggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gtaggctggt tttcttccca ccccttctct agaagggcta
600
ctgctcctgg aagagtggac ggatccataa taaagacgtc ccaaattggtg aaaaaaaaaa
660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

```

<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

```

Ser Glu Cys Glu Ala Glu Glu Glu Gln Lys Arg Lys Asn Gly Glu Asn
 1           5           10           15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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	20		25		30										
Gln	Arg	Val	Glu	Ala	Leu	Pro	Arg	Pro	Val	Pro	Gln	Asn	Leu	Pro	Gln
	35						40					45			
Pro	Gln	Met	Pro	Pro	Tyr	Ala	Phe	Ala	His	Pro	Pro	Phe	Pro	Leu	Pro
	50					55					60				
Pro	Val	Arg	Pro	Val	Phe	Asn	Asn	Phe	Pro	Leu	Asn	Met	Gly	Pro	Ile
65					70					75					80
Pro	Ala	Pro	Tyr	Val	Pro	Pro	Leu	Pro	Asn	Val	Arg	Val	Asn	Tyr	Asp
			85					90					95		
Phe	Gly	Pro	Ile	His	Met	Pro	Leu	Glu	His	Asn	Leu	Pro	Met	His	Phe
		100						105					110		
Gly	Pro	Gln	Pro	Arg	His	Arg	Phe								
	115						120								

<210> 2661

<211> 1395

<212> DNA

<213> Homo sapiens

<400> 2661

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120
gaattagaca gattttctgt tttgaatagc caacacatgt ttgaagtact agctgccatg
180
aatcacccgat ctcttatact cctggatgaa tgcagtaagg tggctcctaga taatatccat
240
gggtgtcctt taagaataat gatcaacata ttgcagtcct gcaaagacct ccagtaccat
300
aatttggatc tcttcaaggg acttgcagat tatgtggctg caactttcga catctggaag
360
ttcagaaaag ttctttttat cctcatttta ttgaaaacc ttggctttcg acctgttggg
420
ttaatggacc tgtttatgaa gagaatagta gaggatcctg aatccctaaa catgaaaaac
480
attctatcta ttcttcatac ttactttct ctcaatcatg tctacaaatg ccagaacaaa
540
gaacagttcg tggaagttat ggctagtgt ctgactgggt atcttcacac tattttcttct
600
gaaaacttat tggatgcagt atattcattt tgcttgatga attactttcc cctggctcct
660
tttaatcagc ttctgcaaaa agacatcatc agtgagctgc tgacatcaga tgacatgaag
720
aatgcttaca agctgcatac tttggatact tgtctaaaac ttgatgatac tgtctatctg
780
agggacatag ccttgtcact cccacagctg ccgcgggagc tgccatcgtc acatacaaat
840
gcaaaggtgg cagaggtgct gagcagcctt ctgggaggtg aaggacactt ctcaaaggat
900
gtgcacttgc cacacaatta tcatattgat tttgaaatca gaatggacac taacaggaat
960
caagtgtac cactttctga tgtggataca acttctgcta cagatattca aagagtagct
1020

gtgctatgtg tttccagatc tgcttattgt ttgggttcaa gccaccccag aggattcctt
 1080
 gctatgaaaa tgccgcattt gaatgcaatg gggtttcatg tgatcttggt caataactgg
 1140
 gagatggaca aactagagat ggaagatgca gtcacatttt tgaagactaa aatctattca
 1200
 gtagaagctc ttcctgttgc tgctgtaaat gtgcaaagca cacaataaag tgaaaatcaa
 1260
 ccttttcata ttaggagaca tgcatttgta aaaattaata aagatgacaa gtcagttgtc
 1320
 aatgggaattg agctatctgc taagacaaaa aatgttacct cagttcacta ttaaaattaa
 1380
 ttttaggagt ggaaa
 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

Leu	Val	Asp	Gln	Gln	Val	Trp	Lys	Ile	Glu	Asp	Val	Phe	Thr	Leu	Gln
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Val	Val	Met	Lys	Cys	Ile	Gly	Lys	Asp	Ala	Pro	Ile	Ala	Leu	Lys	Arg
			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
			35				40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
	50					55					60				
Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
65				70						75				80	
Gly	Cys	Pro	Leu	Arg	Ile	Met	Ile	Asn	Ile	Leu	Gln	Ser	Cys	Lys	Asp
				85					90					95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
		115				120						125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
	130					135					140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150					155					160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
			165					170						175	
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
		180				185							190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
	195					200						205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
	210				215						220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
			245					250						255	
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

260 265 270
 Glu Leu Pro Ser Ser His Thr Asn Ala Lys Val Ala Glu Val Leu Ser
 275 280 285
 Ser Leu Leu Gly Gly Glu Gly His Phe Ser Lys Asp Val His Leu Pro
 290 295 300
 His Asn Tyr His Ile Asp Phe Glu Ile Arg Met Asp Thr Asn Arg Asn
 305 310 315 320
 Gln Val Leu Pro Leu Ser Asp Val Asp Thr Thr Ser Ala Thr Asp Ile
 325 330 335
 Gln Arg Val Ala Val Leu Cys Val Ser Arg Ser Ala Tyr Cys Leu Gly
 340 345 350
 Ser Ser His Pro Arg Gly Phe Leu Ala Met Lys Met Arg His Leu Asn
 355 360 365
 Ala Met Gly Phe His Val Ile Leu Val Asn Asn Trp Glu Met Asp Lys
 370 375 380
 Leu Glu Met Glu Asp Ala Val Thr Phe Leu Lys Thr Lys Ile Tyr Ser
 385 390 395 400
 Val Glu Ala Leu Pro Val Ala Ala Val Asn Val Gln Ser Thr Gln
 405 410 415

<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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 gggaacccgg gagccgaggt aacgaacagc tcggtggcag ggccctgactg ctgaggagggc
 120
 ctcggcaata ttgatttttag acaggcagac ttctgcggtta tgaccgggct gctgggctac
 180
 gtggaccccc tggatcccag ctttgtggct gccgtcatca ccatcacctt caatccgctc
 240
 tactggaatg tggttgcacg atgggaacac aagaccgca agctgagcag ggccttcgga
 300
 tccccctacc tggcctgcta ctctctaage gtcaccatcc tgctcctgaa cttcctgcgc
 360
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 420
 gcggcctaca gcctgggcct cgcgctcctg ggactgggcg tcgtgctcgt gctctccagc
 480
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 540
 gcgagagtga ccgtgttccc cttcaacatc ctggacaacc ccatgtactg gggaagcaca
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 gccaaactacc tgggctgggc catcatgcac gccagcccca cgggcctgct cctgacgggtg
 660
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 720
 taccggcaga aagcctccgg gtcccacaag aggagctgat tgagctgcaa cagctttgct
 780
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 840

tgctgtgtgc tcagggcctc ccccggtgtg ggctgcccc gtgccttgga acctgtgtcc
 900
 ttggggaccc tggacgtgcc gacatatggc cattgagctc caaccacac attcccatc
 960
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 1020
 aaaa
 1024

<210> 2664
 <211> 199
 <212> PRT
 <213> Homo sapiens

<400> 2664
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 Ala Arg Trp Glu His Lys Thr Arg Lys Leu Ser Arg Ala Phe Gly Ser
 35 40 45
 Pro Tyr Leu Ala Cys Tyr Ser Leu Ser Val Thr Ile Leu Leu Leu Asn
 50 55 60
 Phe Leu Arg Ser His Cys Phe Thr Gln Ala Met Leu Ser Gln Pro Arg
 65 70 75 80
 Met Glu Ser Leu Asp Thr Pro Ala Ala Tyr Ser Leu Gly Leu Ala Leu
 85 90 95
 Leu Gly Leu Gly Val Val Leu Val Leu Ser Ser Phe Phe Ala Leu Gly
 100 105 110
 Phe Ala Gly Thr Phe Leu Gly Asp Tyr Phe Gly Ile Leu Lys Glu Ala
 115 120 125
 Arg Val Thr Val Phe Pro Phe Asn Ile Leu Asp Asn Pro Met Tyr Trp
 130 135 140
 Gly Ser Thr Ala Asn Tyr Leu Gly Trp Ala Ile Met His Ala Ser Pro
 145 150 155 160
 Thr Gly Leu Leu Leu Thr Val Leu Val Ala Leu Thr Tyr Ile Met Ala
 165 170 175
 Leu Leu Tyr Glu Glu Pro Phe Thr Ala Glu Ile Tyr Arg Gln Lys Ala
 180 185 190
 Ser Gly Ser His Lys Arg Ser
 195

<210> 2665
 <211> 720
 <212> DNA
 <213> Homo sapiens

<400> 2665
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 120
 gcgccaatgc gaagcggtgc agtcgcttga ctcacctgag gctctccaag gataccttca
 180

atgcctgcac tgtaagggag ctgcttttcc cgggtgctgg cgagaacgga agccttcctt
 240
 tgacgttttt ctaaacaatgg gatgcagtct gtgcagcctg cagaagcaag aggagcagta
 300
 caaattactt atgaagtttg tcagggtcaac ggcagagact tatccagagc aactcatgac
 360
 caggctgtgg aagcttttcaa gacagccaag gagcccatag tgggtgcaggt gttgagaaga
 420
 acaccaagga ccaaaatggt cagcctcca tcagagtctc agctgggtgga caggggaacc
 480
 caaacgaca tcacctttga acatatcatg gccctcacta agatgtcctc tcccagccca
 540
 cccgtgctgg atccctatct cttgccagag gagcatccct cagcccatga atactacgat
 600
 ccaaagact acattggaga catccatcag gagatggaca gggaggagct ggagctggag
 660
 gaagtggacc tctacagaat gaacagccag gacaagctgg gcctcactgt gtgctaccgg
 720

<210> 2666
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2666
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 Tyr Glu Val Cys Gln Val Asn Gly Arg Asp Leu Ser Arg Ala Thr His
 20 25 30
 Asp Gln Ala Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val
 35 40 45
 Gln Val Leu Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro Pro Ser
 50 55 60
 Glu Ser Gln Leu Val Asp Thr Gly Thr Gln Thr Asp Ile Thr Phe Glu
 65 70 75 80
 His Ile Met Ala Leu Thr Lys Met Ser Ser Pro Ser Pro Pro Val Leu
 85 90 95
 Asp Pro Tyr Leu Leu Pro Glu Glu His Pro Ser Ala His Glu Tyr Tyr
 100 105 110
 Asp Pro Asn Asp Tyr Ile Gly Asp Ile His Gln Glu Met Asp Arg Glu
 115 120 125
 Glu Leu Glu Leu Glu Glu Val Asp Leu Tyr Arg Met Asn Ser Gln Asp
 130 135 140
 Lys Leu Gly Leu Thr Val Cys Tyr Arg
 145 150

<210> 2667
 <211> 289
 <212> DNA
 <213> Homo sapiens

<400> 2667
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gccagagacg cggaacaatt gagcaagaac aaggggaacc ctttttctgt ttgtccccga
 120
 tgggtgccag gcctatgttg gaggacaaga catttcaaag aaagtattaa attcattcac
 180
 gagtgccggc tccgcgggga gagctgcctt gtacactgcc tggccgggggt ctccaggagc
 240
 gtgacactgg tgatcgcata catcatgacc gtcactgact ttggctggg
 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

Xaa	Met	Gly	Asn	Gly	Met	Asn	Lys	Ile	Leu	Pro	Gly	Leu	Tyr	Ile	Gly
1				5					10					15	
Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
			35				40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55					60				
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70				75					80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
			85					90						95	

<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 cgcaggtggg gcggttgtca gagccccctg acgtggggcg cgggctttta tcggcgattt
 120
 gatctggcga cctcggggcg gcgcctaaga ggtcagactg cggagcctgc gggtcgccag
 180
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<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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<210> 2674

<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

Ala	Ala	Gly	Phe	Arg	Ala	Met	Ile	Pro	Pro	Gln	Glu	Ala	Ser	Ala	Arg
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Arg	Arg	Glu	Ile	Glu	Asp	Lys	Leu	Lys	Gln	Glu	Glu	Glu	Thr	Leu	Ser
		20						25					30		
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
	35						40					45			
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50					55					60				
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
65					70					75				80	
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
			85						90					95	
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
		100						105					110		
Gly	Arg	Leu	Glu	Glu	Tyr	Leu	Gly	Ser	Met	Ala	Lys	Ile	Gln	Lys	Ala
		115					120						125		
Val	Glu	Tyr	Phe	Gln	Asp	Asn	Ser	Pro	Asp	Ser	Pro	Glu	Leu	Asn	Lys
	130					135					140				
Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
145					150					155					160
Arg	Ser	Leu	Met	Thr	Arg	His	Ser	Lys	Val	Val	Ser	Pro	Val	Leu	Ile
			165						170					175	
Leu	Asp	Leu	Ile	Ser	Gly	Asp	Asp	Asp	Leu	Glu	Ala	Gln	Glu	Asp	Val
		180					185						190		
Thr	Leu	Glu	His	Leu	Pro	Glu	Ser	Val	Leu	Gln	Asp	Val	Ile	Arg	Ile
	195						200						205		
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210					215					220				
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
225					230					235					240
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
			245						250					255	
Pro	Ala	Ile	Pro	Asn	Lys	Arg	Lys	Asp	Thr	Pro	Thr	Lys	Lys	Pro	Val

260 265 270
 Lys Arg Pro Gly Thr Ile Arg Lys Ala Gln Asn Leu Leu Lys Gln Tyr
 275 280 285
 Ser Gln His Gly Leu Asp Gly Lys Lys Gly Gly Ser Asn Leu Ile Pro
 290 295 300
 Leu Glu Gly Arg Asp Asp Met Leu Asp Val Glu Thr Asp Ala Tyr Ile
 305 310 315 320
 His Cys Val Ser Ala Phe Val Lys Leu Ala Gln Ser Glu Tyr Gln Leu
 325 330 335
 Leu Ala Asp Ile Ile Pro Glu His His Gln Lys Lys Thr Phe Asp Ser
 340 345 350
 Leu Ile Gln Asp Ala Leu Asp Gly Leu Met Leu Glu Gly Glu Asn Ile
 355 360 365
 Val Ser Ala Ala Arg Lys Ala Ile Val Arg His Asp Phe Ser Thr Val
 370 375 380
 Leu Thr Val Phe Pro Ile Leu Arg His Leu Lys Gln Thr Lys Pro Glu
 385 390 395 400
 Phe Asp Gln Val Leu Gln Gly Thr Ala Ala Ser Thr Lys Asn Lys Leu
 405 410 415
 Pro Gly Leu Ile Thr Ser Met Glu Thr Ile Gly Ala Lys Ala Leu Glu
 420 425 430
 Asp Phe Ala Asp Asn Ile Lys Asn Asp Pro Asp Lys Glu Tyr Asn Met
 435 440 445
 Pro Lys Asp Gly Thr Val His Glu Leu Thr Ser Asn Ala Ile Leu Phe
 450 455 460
 Leu Gln Gln Leu Leu Asp Phe Gln Glu Thr Ala Gly Ala Met Leu Ala
 465 470 475 480
 Ser Gln Glu Thr Ser Ser Ser Ala Thr Ser Tyr Ser Ser Glu Phe Ser
 485 490 495
 Lys Arg Leu Leu Ser Thr Tyr Ile Cys Lys Val Leu Gly Asn Leu Gln
 500 505 510
 Leu Asn Leu Leu Ser Lys Ser Lys Val Tyr Glu Asp Pro Ala Leu Ser
 515 520 525
 Ala Ile Phe Leu His Asn Asn Tyr Asn Tyr Ile Leu Lys Ser Leu Glu
 530 535 540
 Lys Ser Glu Leu Ile Gln Leu Val Ala Val Thr Gln Lys Thr Ala Glu
 545 550 555 560
 Arg Ser Tyr Arg Glu His Ile Glu Gln Gln Ile Gln Thr Tyr Gln Arg
 565 570 575
 Ser Trp Leu Lys Val Thr Asp Tyr Ile Ala Glu Lys Asn Leu Pro Val
 580 585 590
 Phe Gln Pro Gly Val Lys Leu Arg Asp Lys Glu Arg Gln Ile Ile Lys
 595 600 605
 Glu Arg Phe Lys Gly Phe Asn Asp Gly Leu Glu Glu Leu Cys Lys Ile
 610 615 620
 Gln Lys Ala Trp Ala Ile Pro Asp Thr Glu Gln Arg Asp Arg Ile Arg
 625 630 635 640
 Gln Ala Gln Lys Thr Ile Val Lys Glu Thr Tyr Gly Ala Phe Leu Gln
 645 650 655
 Lys Phe Gly Ser Val Pro Phe Thr Lys Asn Pro Glu Lys Tyr Ile Lys
 660 665 670
 Tyr Gly Val Glu Gln Val Gly Asp Met Ile Asp Arg Leu Phe Asp Thr
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 Ser Ala

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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120
gcagtgggag tccctgcgct tcggcgaata tggagaccct ctgcagtgtg gagcctgggt
180
cgggcagtgc gctctttaca tcgtgatcat gatttttgaa aagtctgtcg tcttcacgt
240
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300
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420
caaccaggac tcgaggaatg ggagcaaggt ccgctaccgg agggccgcat cccacgagga
480
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540
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600
acccgatatga cacattccca tgctgggggt gacgggaggg ccccgccagc cgctgggtgtg
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711

```

<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

```

Met Leu Leu Ile Tyr Val Gly Val Arg Ala Val Ser Val Leu Val Glu
1      5      10      15
Trp Gln Gln Trp Glu Ser Leu Arg Phe Gly Glu Tyr Gly Asp Pro Leu
20     25     30
Gln Cys Gly Ala Trp Val Gly Gln Cys Ala Leu Tyr Ile Val Ile Met
35     40     45
Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Leu Gln Trp
50     55     60
Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
65     70     75     80
Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
85     90     95
Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
100    105    110
Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

```

```

      115      120      125
Arg Tyr Arg Arg Ala Ala Ser His Glu Glu Ser Glu Ser Glu Ile Leu
      130      135      140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
      145      150      155      160
Arg Arg Leu Thr Pro Leu Lys Pro Val Lys Lys Lys Lys His Arg Phe
      165      170      175
Gly Leu Pro Val
      180

```

<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

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120
gagccccctt tgcagggcag gagctgggga gtggttagga catcagtccc tcaggtaggg
180
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480
gcgcaggagg ccgcccaggt gagctcgggc acccgtgtca ggatgcaggg ggtggggccg
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600
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660
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ctgggatggt ggtcg
735

```

<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2678

```

Leu Ala Ala Leu Ser Ala Ala Trp Gly Arg Asp Gly Gln Val His Gly
1      5      10      15
Pro Ala Cys Val Ser Thr Pro Pro Ser Ala Gly Ala Phe Ser Leu Leu
20     25     30
Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

```

```

      35              40              45
Leu Cys Ala Leu Glu Gln Leu Met Met Ala Gln Ala Gln Glu Cys Val
  50              55              60
Phe Glu Gly Leu Ser Pro Pro Ala Ser Met Ala Pro Gln Asp Cys Leu
65              70              75              80
Ala Gln Leu Arg Leu Ala Gln Glu Ala Ala Gln Val Ser Ser Gly Thr
      85              90              95
Arg Val Arg Met Gln Gly Val Gly Pro Ser Trp Gly Gln Ser Pro Gly
      100              105              110
Pro Gly Met Arg Glu Leu Ser His Leu Leu Pro Cys Val Ser Ala Pro
      115              120              125
Ser Gln Leu Leu Ser Cys Ser Leu Gly Gly Leu Val Arg Asn Leu Gly
      130              135              140
Thr Arg Ala Ser Ala Ser Arg Glu Trp His Lys Ala Ala Gly Thr Glu
145              150              155              160
Val Pro Gly Arg Leu Leu Gly Trp Trp Ser
      165              170

```

<210> 2679

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2679

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120
ggctgcagac aaagtgcggc aacagggact ccaccaggcc atggagctca tcccacaaga
180
cgcctcaccg cacaggaggg ctgaccccag ggaaacgtgt caccaggaca cagcacgaag
240
ctcaaaaagg gctagcatgc tctgtgcagc tgccagactc tgccctgaag aatcacaggg
300
cactctagtg agcgctgcag cagccagcag gccctggatg gccagggtgtg cagtggggag
360
gcacaggggg tgcaccagga cgcagccaga cctggggccag ttcgcgccga ctcttctcca
420
ttccagaggt ccaggaagca cctgtcaatg tggaagtcag aatgctcagg ccaaataccg
480
agatcaacta actattcagg ttgaaccaga ggccctgggcg ggggcatcca actgcccacc
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cgtcagactg agggacgcgt
560

```

<210> 2680

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2680

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Met Glu Leu Ile Pro Gln Asp Ala Ser Pro His Arg Arg Ala Asp Pro
  1              5              10              15
Arg Glu Thr Cys His Gln Asp Thr Ala Arg Ser Ser Lys Gly Ala Ser

```

20 25 30
 Met Leu Cys Ala Ala Ala Arg Leu Cys Pro Glu Glu Ser Gln Gly Thr
 35 40 45
 Leu Val Ser Ala Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
 50 55 60
 Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
 65 70 75 80
 Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
 85 90 95
 Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
 100 105 110
 Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
 115 120 125
 Arg Leu Arg Asp Ala
 130

<210> 2681
 <211> 585
 <212> DNA
 <213> Homo sapiens

<400> 2681
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 atctgtttgt ggacttctcc aatataacta gstatgcctgg gctcattctg cttcttctct
 120
 tctggaatag tttatttcat gaccatgtgc agagggggtg atggggcaag cctcacaagc
 180
 cccggagggtc tgtgggtgag gtgtaccttg gctttgttgc ctggaactgc tctgactctg
 240
 ctcttcgctc tttcctgggc tgtgtcacta cagctctgac tcctttccac cttggagttt
 300
 agcttccctg ccaggaaagc taaggagtag gagttgttct tggaaacaaa tgccgagcga
 360
 tgtgtctgtg tcatctggcc tcgagaaggt tcttcattct ctgaatctga gagacgtgca
 420
 ggacaacgtt ccagatttgt tttcagtact aatgggtcat ctcttttttt ctgttcatcc
 480
 attttccttt tcctgtttc tgtatcctct ggtaacagct tgtggatttg atcttcagag
 540
 ggtttttctt cttgtaactt ttcttctctc agctttctca agctt
 585

<210> 2682
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 2682
 Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
 1 5 10 15
 Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
 20 25 30
 Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys


```

          35          40          45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
    50          55          60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
65          70          75          80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
          85          90          95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
          100          105          110
Met Val Met Lys
          115

```

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

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atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtgtg gtcactcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca caccctcatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccagggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccggttacc ctgtcctcat gaaccatagg
480
gtctgtcttt tcctggca
498

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<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
 1          5          10          15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
          20          25          30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
          35          40          45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
          50          55          60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
65          70          75          80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

```

<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

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cgcaatgagc tggctgccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggcccttg gccccctgct ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaatcagc tcacagagat cccggagggg
240
ctcccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttctgccc
300
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360
gtgggctccg tagtagaaag cgccttccgg a
391

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<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

```

Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Leu Ala Arg Gly Ala Leu
20     25     30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35     40     45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50     55     60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65     70     75     80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85     90     95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100    105    110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115    120    125
Phe Arg

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130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

nagtgcaaga aatgtttaat acaagagatt gaaccctacc aaaatgggag gtttagcctc
 60
 caggaatggg agtgcaataa atctctaata caagagattg agcctcacca acctccagga
 120
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtccgc taggccttat gttaagatac cggaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg tttatttggga ctaaggaacc catcctgaaa
 300
 cctttggtct tttggccaca gttaggggtg agcgggggact ggatatgcca actcctaac
 360
 cagtatgtaa aggataaaaag tccagtttct caagaggag
 399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1				5				10						15	
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
			35				40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
			50				55				60				
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
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Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
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<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

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 Asp Lys Leu Gly Gly Arg Val Ala Ser
 65 70

<210> 2691
 <211> 532
 <212> DNA
 <213> Homo sapiens

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<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

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		20						25					30		
Met	Gly	Tyr	Val	His	Arg	Ser	Val	Lys	Ala	Ser	His	Ile	Leu	Ile	Ser
	35						40					45			
Val	Asp	Gly	Lys	Val	Tyr	Leu	Ser	Gly	Leu	Arg	Ser	Asn	Leu	Ser	Met
	50					55					60				
Ile	Ser	His	Gly	Gln	Arg	Gln	Arg	Val	Val	His	Asp	Phe	Pro	Lys	Tyr
65					70					75					80
Ser	Val	Lys	Val	Leu	Pro	Trp	Leu	Ser	Pro	Glu	Val	Leu	Gln	Gln	Asn
			85						90					95	
Leu	Gln	Gly	Tyr	Asp	Ala	Lys	Ser	Asp	Ile	Tyr	Ser	Val	Gly	Ile	Thr
		100						105					110		
Ala	Cys	Glu	Leu	Ala	Asn	Gly	His	Val	Pro	Phe	Lys	Asp	Met	Pro	Ala
	115						120					125			
Thr	Gln	Met	Leu	Leu	Glu	Lys	Leu	Asn	Gly	Thr	Val	Pro	Cys	Leu	Leu
	130					135					140				
Asp	Thr	Ser	Thr	Ile	Pro	Ala	Glu	Glu	Leu	Thr	Met	Ser	Pro	Ser	Arg
145					150					155					160
Ser	Val	Ala	Asn	Ser	Gly	Leu	Ser	Asp	Ser	Leu	Thr	Thr	Ser	Thr	Pro
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Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

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 Glu Thr Leu Asp Leu Asn Tyr Asn Lys Leu Gln Glu Phe Pro Val Ala
 35 40 45
 Ile Arg Thr Leu Gly Arg Leu Gln Glu Leu Gly Phe His Asn Asn Asn
 50 55 60
 Ile Lys Ala Ile Pro Glu Lys Ala Phe Met Gly Asn Pro Leu Leu Gln
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 Thr Ile His Phe Tyr Asp Asn Pro Ile Gln Phe Val Gly Arg Ser Ala
 85 90 95
 Phe Gln Tyr Leu Pro Lys Leu His Thr Leu Ser Leu Asn Gly Ala Met
 100 105 110
 Asp Ile Gln Glu Phe Pro Asp Leu Lys Gly Thr Thr Ser Leu Glu Ile
 115 120 125
 Leu Thr Leu Thr Arg Ala Gly Ile Arg Leu Leu Pro Ser Gly Met Cys
 130 135 140
 Gln Gln Leu Pro Arg Leu Arg Val Leu Glu Leu Ser His Asn Gln Ile
 145 150 155 160
 Glu Glu Leu Pro Ser Leu His Arg Cys Gln Lys Leu Glu Glu Ile Gly
 165 170 175
 Leu Gln His Asn Arg Ile Trp Glu Ile Gly Ala Asp Thr Phe Ser Gln
 180 185 190
 Leu Ser Ser Leu Gln Ala Leu Asp Leu Arg Trp Asn Ala Ile Arg Ser
 195 200 205
 Ile His Pro Glu Ala Phe Ser Thr Leu His Ser Leu Val Lys Leu Asp
 210 215 220
 Leu Thr Asp Asn Gln Leu Thr Thr Leu Pro Leu Ala Gly Leu Gly Gly
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265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

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			20					25					30		
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Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
			50			55					60				
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
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Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85					90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
			100				105						110		
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			115				120					125			
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Asp	Lys	Val	Arg	Val	Phe	Gln	Ala	Thr	Arg	Gly	Lys	Leu	Ser	Ser	Lys 200
Cys 225	Ser	Val	Val	Leu	Gly	Pro	Lys	Trp	Pro	Ser	His	Tyr	Leu	Met	Val 210
Pro	Gly	Gly	Lys	His	Asn	Met	Asp	Phe	Tyr	Val	Glu	Ala	Leu	Ala	Phe 220
Pro	Asp	Thr	Asp	Phe	Pro	Gly	Leu	Ile	Thr	Leu	Thr	Ile	Ser	Leu	Leu 230
Asp	Thr	Ser	Asn	Leu	Glu	Leu	Pro	Glu	Ala	Val	Val	Phe	Gln	Asp	Ser 240
Val	Val	Phe	Arg	Val	Ala	Pro	Trp	Ile	Met	Thr	Pro	Asn	Thr	Gln	Pro 250
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Cys	Pro	Glu	Glu	Glu	Asn	Met	Asp	Asp	Gln	Trp	Met	Gln	Asp	Glu	Met 325
Glu	Ile	Gly	Tyr	Ile	Gln	Ala	Pro	His	Lys	Thr	Leu	Pro	Val	Val	Phe 340
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Asp	Trp	Leu	Ser	Val	Gly	His	Val	Asp	Glu	Phe	Leu	Ser	Phe	Val	Pro 450
Ala	Pro	Asp	Arg	Lys	Gly	Phe	Arg	Leu	Leu	Leu	Ala	Ser	Pro	Arg	Ser 465
Cys	Tyr	Lys	Leu	Phe	Gln	Glu	Gln	Gln	Asn	Glu	Gly	His	Gly	Glu	Ala 485
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Cys	Ile	Asp	Trp	Asn	Arg	Glu	Leu	Leu	Lys	Arg	Glu	Leu	Gly	Leu	Ala 515
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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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 Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
 50 55 60
 Arg Gln Gly Ile Val Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
 65 70 75 80
 Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
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 Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
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<211> 974

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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 Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
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 Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
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<213> Homo sapiens

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<400> 2714

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Leu	Val	Glu	Thr	Ser	Gly	Ile	Ser	Ile	Tyr	Arg	Leu	Leu	Asp	Lys	Lys
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Thr	Gly	Leu	Tyr	Glu	Tyr	Lys	Val	Phe	Gly	Val	Leu	Glu	Asp	Cys	Ser
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 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
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<212> PRT

<213> Homo sapiens

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<212> DNA

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 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
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 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
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 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
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 <212> PRT
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 Leu Asn Gly Trp Gln Asn Ser Arg Asp Ser Gly Ile Cys Ile Asn Ala
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 100 105 110
 Ser Thr Ser Thr Asn Val Pro Ala Trp Leu Lys Ser Leu Arg Leu His
 115 120 125
 Lys Tyr Ala Ala Leu Phe Ser Gln Met Thr Tyr Glu Glu Met Met Ala
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 His Lys Ile Val Ile Ser Ile Gln Lys Leu Lys Glu Arg Gln Asn Leu


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Glu Glu Asn Ile Ser Ser Tyr Leu Gln Leu Ile Asp Lys Cys Leu Ile
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<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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 360
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 420
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<210> 2724

<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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Thr	Ile	His	Met	Phe	Gly	Asp	His	Thr	Asn	Arg	Val	Lys	Arg	Ile	Ala
			20					25					30		
Thr	Ala	Pro	Met	Trp	Pro	Asn	Thr	Phe	Trp	Ser	Ala	Ala	Glu	Asp	Gly
			35				40						45		
Leu	Ile	Arg	Gln	Tyr	Asp	Leu	Arg	Glu	Asn	Ser	Lys	His	Ser	Glu	Val
	50					55					60				
Leu	Ile	Asp	Leu	Thr	Glu	Tyr	Cys	Gly	Gln	Leu	Val	Glu	Ala	Lys	Cys

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65          70          75          80
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser
      85          90          95
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg
      100          105          110
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
      115          120          125
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
      130          135          140
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
      145          150          155          160
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
      165          170          175
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
      180          185          190
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
      195          200          205
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
      210          215          220
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
      225          230          235          240
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val
      245          250          255
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
      260          265          270
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met
      275          280          285
Leu Tyr Gly Asn Arg Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly
      290          295          300
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
      305          310          315          320
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
      325          330          335
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
      340          345          350
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
      355          360          365
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys
      370          375          380
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys
      385          390          395          400
Gly Cys Thr Arg

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<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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ctgaccccgg cggccctgcc cgcccctccc tccagcatca tggccagccc aagaaccagg
120

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aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg
180
ttcaatcctc agtgggtcag tgtgacctac ggcattctgga tctgcctgga gtgctcgggg
240
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300
aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagttccg agagttcctg
360
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420
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480
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540
cggtagctgc tcctcgtggg gccttagtac agtttccact gggtcctgaa cttagtagat
600
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660
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720
acccatagag ctgtctcaga tagcgcccca ggtaagctcc gcacgccttc caggtgtgca
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<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

Met	Ala	Ser	Pro	Arg	Thr	Arg	Lys	Val	Leu	Lys	Glu	Val	Arg	Val	Gln
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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
		20						25					30		
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35					40					45			
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
		50				55					60				
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65					70				75					80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85						90					95	
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
	115						120					125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
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Met	Val	His	Arg												
145															

<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

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 120
 taaatctggg atattaaatt gtgctgtaaa tagatttgta tattttcttt tttgagtact
 180
 atgatagggtg aaatgggtatg actataaaaa ggatttggtt ctttttgtct cctggaatga
 240
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg
 300
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa
 360
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 420
 gctgtttata catgcccgtc atcgctctgg ctgcactgta gatcatctgc cgacgggaca
 480
 tcccagtaaa tgccatgtgc caatcagtcc ggctgacatt cagtaaactc ttttccagga
 540
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 600
 tttgagcctg ctgtacaaat tccaaaggca ctgggtgtggc ttgtgtaaata gtttctagat
 660
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca
 720
 gcaattctgc aatgaagttt tctactgaca cagctgtctg tttttcatgg atcacccag
 780
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 840
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 900
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 960
 ccagttcacc tccagatttg atatagggag ccatgccagg gtccagcggt gtaatcatgc
 1020
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 1080
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 1119

<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2728
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 1 5 10 15
 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

```

      20      25      30
Glu Leu Asp Ile Val Val Thr Ser Asn Lys Glu Val Lys Val Ala Ala
  35      40      45
Val Arg Asp Ala Phe Gln Glu Val Phe Gly Leu Ala Val Val Val Gly
  50      55      60
Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr Ala Ala
  65      70      75      80
Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly
      85      90      95
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala
      100      105      110
Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu
      115      120      125
Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro
      130      135      140
Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp
  145      150      155      160
Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu
      165      170      175
Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe
      180      185      190
Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg Ala Ile
      195      200      205
Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val
      210      215      220

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<210> 2729
 <211> 393
 <212> DNA
 <213> Homo sapiens

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<400> 2729
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atgcagcccc agcagtgggtg aggcactact ttcttgaaga gttgtgcatc catgtaggtc
120
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180
agttcctctt cctcttccat actaagggcc tggcttgacc agtgtgcaga agacttccga
240
gagccccctc acttcccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300
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360
gaaactgaca atgggcttcc caacacgata tcc
393

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<210> 2730
 <211> 92
 <212> PRT
 <213> Homo sapiens

```

<400> 2730
Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```

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Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
      85           90

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<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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necctccga cctgaaagca cgtccacctc tgcggctcct acctgggtgc aatcgagtta
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aatggctgat aagcagatca gcctgccagc caagctcatc aatggcggca tcgcgggctg
120
atcgggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
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300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
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447

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<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
1           5           10           15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
      20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
      35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
      50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
      65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
      85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

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	100		105		110
Gln	Val	Ile	Val	Thr	Thr
			Pro	Met	Glu
				Met	Leu
					Lys
					Ile
	115		120		125

<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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120
ccccagcacc catgtcacc ccaacagctg gactgcccgc tggccatgga gcggatcaag
180
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240
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420
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720
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780
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1260
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1320

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<210> 2734

<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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			20					25					30		
Val	Met	Asp	Lys	Leu	Arg	Leu	Ala	Glu	Leu	Thr	Val	Asp	Glu	Phe	Leu
		35				40					45				
Ala	Ser	Gly	Phe	Asp	Ser	Glu	Ser	Glu	Ser	Glu	Ser	Glu	Asn	Ser	Pro
	50				55					60					
Gln	Ala	Glu	Thr	Arg	Glu	Ala	Arg	Glu	Ala	Ala	Arg	Ser	Pro	Asp	Lys
65				70				75						80	
Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
			85					90					95		
His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
			100				105					110			
Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
		115				120					125				
Asp	Ser	Ser	Glu	Glu	Glu	Glu	Gly	Pro	Phe	His	Ser	Leu	Pro	Asp	Val
	130				135					140					
Leu	Glu	Glu	Ala	Ser	Glu	Glu	Glu	Asp	Gly	Ala	Glu	Glu	Gly	Glu	Asp
145				150				155						160	
Gly	Asp	Arg	Val	Pro	Arg	Gly	Leu	Lys	Gly	Lys	Lys	Asn	Ser	Val	Pro
			165				170							175	
Val	Thr	Val	Ala	Met	Val	Glu	Arg	Trp	Lys	Gln	Ala	Ala	Lys	Gln	Arg

1975

610		615		620
Glu Gln Gln Ala Val	Glu Ala Trp Glu Lys Leu Thr Arg Glu Glu Gly			
625	630	635	640	
Thr Pro Leu Thr Leu Tyr Tyr Ser His Trp Arg Lys Leu Arg Asp Arg				
	645	650	655	
Glu Ile Gln Leu Glu Ile Ser Gly Lys Glu Arg Val Arg Leu Gly Glu				
	660	665	670	
Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys				
	675	680	685	
Met Ala Asp Arg Lys Asp Glu Asp Arg Lys Gln Phe Lys Asp Leu Phe				
	690	695	700	
Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg				
705	710	715	720	
Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu				
	725	730	735	
Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu				
	740	745	750	
Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly				
	755	760	765	
Glu Leu Gln Gln Leu Ala Gln Gly Pro Glu Asp Glu Leu Glu Asp Leu				
	770	775	780	
Gln Leu Ser Glu Asp Asp				
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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120
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180
aacgagttcc actcctcgca catctccacc atcgggtgttg actttaagat gaagaccata
240
gaggtagacg gcatcaaagt gcggatacag atctgggaca ctgcagggca ggagagatac
300
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360
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420
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480
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540
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600
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660
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720

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aactcttcga aaacctgctg gtgctgagtc ctgtgtgggg caccacacac gacacccctc
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840
tcgtgtgatg accctattga gtatcagtag ccactactcc ccctgcctgg ccctgagagc
900
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1020
tctcaccatc ccgcacccac cagacaacag ccagggtctg agtccaggcc actttcagct
1080
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1140
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1200
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1560
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<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

Met	Ala	Lys	Gln	Tyr	Asp	Val	Leu	Phe	Arg	Leu	Leu	Leu	Ile	Gly	Asp
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Ser	Gly	Val	Gly	Lys	Thr	Cys	Leu	Leu	Cys	Arg	Phe	Thr	Asp	Asn	Glu
		20						25					30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
		35				40					45				
Thr	Ile	Glu	Val	Asp	Gly	Ile	Lys	Val	Arg	Ile	Gln	Ile	Trp	Asp	Thr
	50					55					60				
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65				70					75					80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
			85					90					95		
Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
		100					105					110			
Gly	Val	Gln	Lys	Ile	Leu	Ile	Gly	Asn	Lys	Ala	Asp	Glu	Glu	Gln	Lys

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<210> 2738
<211> 299
<212> PRT
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<213> Homo sapiens

<400> 2738

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          20           25           30
Ile Val Asp Gln Cys Glu Arg Leu Gln Leu Gln Ser Ala Ala Ile Thr
          35           40           45
Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
          50           55           60
Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
        65           70           75           80
Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
          85           90           95
Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
          100           105           110
Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
          115           120           125
Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
          130           135           140
Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
        145           150           155           160
Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
          165           170           175
Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
          180           185           190
Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
        195           200           205
Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
          210           215           220
Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
        225           230           235           240
Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
          245           250           255
Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
          260           265           270
Gly Ser Gly Ser Asp Cys Arg Leu Gly His Asn Ala Phe Ser Trp Val
          275           280           285
Phe Ser Arg Tyr Asp Gln Glu Phe Arg Phe Ser
          290           295

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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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120
ttcatcttcg gcttctgctg gctgagtcgc gcgctgcagg atctgcaagc cacggaggcc
180

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aattgcacgg tgctgtcggg gcagcagatc ggcgagggtg tcgagtgcac cttcacctgt
240
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300
gagtcacaact ctagggcgct gctgcacagc gacgagcacc agctcctgac caaccccaag
360
tgctcctata tccctccctg taagagagaa aatcagaaga atttggaag tgatcatgaat
420
tggcaacagt actggaaaga tgagattggg tcccagccat ttacttgcta ttttaataca
480
catcaaagac cagatgatgt gcttctgcat cgcactcatg atgagattgt cctcctgcat
540
tgctcctctt ggccctcggg gacatttctg gtggcggttc tcattgtggg cctgaccatc
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tgtgccaaga gcttggcggt caaggcgga gccatgaaga agcgcaagtt ctcttaaagg
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720
cggaacctgt gtttcctggc gcaggagatg gacagggcca cgacagggtc ctgagaggct
780
catccctcag tggcaacaga aacaggcaca actggaagac ttggaacctc aaagcttgta
840
ttccatctgc ttagcaatg gctaaagggt caagatctta gctgtatgga gtaactatct
900
cagaaaaccc tataagaagt tcattttctt tcaaaagtaa cagtatatta tttgtacagt
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gtagtataca aaccattatg atttatgcta cttaaaaata ttaaaataga gtgggtctgtg
1020
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1080
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1140
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1320
taaccattat ttttcaccag attacttctt aagagaggga ggtgattctg aagaaggctt
1380
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1500
a
1501

<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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	20	25	30
Ile Ile Ser	Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu		
	35	40	45
Ser Pro Ala	Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val		
	50	55	60
Leu Ser Val	Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys		
65		70	75
Gly Ala Asp	Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr		
	85	90	95
Val Asn Asn	Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu		
	100	105	110
His Gln Leu	Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys		
	115	120	125
Arg Glu Asn	Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr		
	130	135	140
Trp Lys Asp	Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln		
145		150	155
His Gln Arg	Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile		
	165	170	175
Val Leu Leu	His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly		
	180	185	190
Val Leu Ile	Val Val Leu Thr Ile Cys Ala Lys Ser Leu Ala Val Lys		
	195	200	205
Ala Glu Ala	Met Lys Lys Arg Lys Phe Ser		
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<210> 2741

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 2741

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120
tctacaagg actggtctca gaacatgtat ttcaactgct cagaagacaa cccagtcga
180
gagcgctgct ctgtgcctta ctctgttgc ttgcctactc ctgaccaggc agtgatcaac
240
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300
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420
gtgaatcaga tcaaagatca gatcaagcta cagctctaca accagcagca ccgggctgac
480
ccatggtact gagaatccat cctgcacctc ctcaccatgg aaactggcaa gcctcataaa
540
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600

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gacagcccag tgggaagaag caaactccag atgggcagaa ggcaggggtgc acaggtgggt
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 ccagtctcag gaggatgcgc ctctctccc ccatcccage cctcagcatt gtgccagagt
 720
 gataccctta agtgtttggg tttatgtttt cagttttgtt tgggaaacag cagttgcaca
 780
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 960
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 1080
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 1200
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 1260
 attcctccct gtctggccct ccctctccag caagcagggg tttctttaac ttggcagtgt
 1320
 gcagaggaga agtggttaaca cccccacccc attcccctgc atcggagctc agtattccta
 1380
 cagggtaaga ggtaggaatc ttgctgggac gaggggagcc agaagtggca ataaaagcgt
 1440
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 1487

<210> 2742

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2742

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Tyr	Arg	Asp	Asp	Leu	Asp	Leu	Gln	Asn	Leu	Ile	Asp	Phe	Gly	Gln	Lys
			20					25					30		
Lys	Phe	Ser	Cys	Cys	Gly	Gly	Ile	Ser	Tyr	Lys	Asp	Trp	Ser	Gln	Asn
		35					40					45			
Met	Tyr	Phe	Asn	Cys	Ser	Glu	Asp	Asn	Pro	Ser	Arg	Glu	Arg	Cys	Ser
	50					55					60				
Val	Pro	Tyr	Ser	Cys	Cys	Leu	Pro	Thr	Pro	Asp	Gln	Ala	Val	Ile	Asn
65					70					75				80	
Thr	Met	Cys	Gly	Gln	Gly	Met	Gln	Ala	Phe	Asp	Tyr	Leu	Glu	Ala	Ser
			85					90					95		
Lys	Val	Ile	Tyr	Thr	Asn	Gly	Cys	Ile	Asp	Lys	Leu	Val	Asn	Trp	Ile
		100					105						110		
His	Ser	Asn	Leu	Phe	Leu	Leu	Gly	Gly	Val	Ala	Leu	Gly	Leu	Ala	Ile
		115				120						125			
Pro	Gln	Leu	Val	Gly	Ile	Leu	Leu	Ser	Gln	Ile	Leu	Val	Asn	Gln	Ile

130 135 140
 Lys Asp Gln Ile Lys Leu Gln Leu Tyr Asn Gln Gln His Arg Ala Asp
 145 150 155 160
 Pro Trp Tyr

<210> 2743
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 2743
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 120
 acagcctccc aagactcagg tgtccagtct ccacctggag cctccagaga ctggagtgtc
 180
 ccatctccgc ccagagccta ccaagactga ggtgtccagt ctccacctgg agcctcccca
 240
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 360
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 384

<210> 2744
 <211> 69
 <212> PRT
 <213> Homo sapiens

<400> 2744
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 20 25 30
 Asp Trp Ser Val Pro Ser Pro Pro Thr Ala Ser Gln Asp Ser Gly Val
 35 40 45
 Gln Ser Pro Pro Gly Ala Ser Arg Asp Trp Ser Val Pro Ser Pro Pro
 50 55 60
 Arg Ala Tyr Gln Asp
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<210> 2745
 <211> 769
 <212> DNA
 <213> Homo sapiens

<400> 2745
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 120

agtatcacct gagaaaatta ggcattccccg tcttggaac acgtctctgt gagtttgcac
 180
 ttcatttggc ttggagccct ggctcgatgc ctcatggatc tttctcccca aggagggacg
 240
 tcttgagggg tccgagcctc aggccaagga cccctgatgc agactctgga atccctggcc
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 360
 gaaatgtatt ctctgaggac acttagaata tgaggaagag ggtgtggccc aaccctcact
 420
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 480
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 600
 cacaccacag ccaggagggg ctttccac ctgggagaga aacttccaga ccagccctc
 660
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 720
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<210> 2746

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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Lys	Leu	Pro	Asp	Gln	Pro	Ser	His	His	Thr	Gln	Lys	Arg	Pro	Phe	Pro
			20					25					30		
Ser	Gly	Glu	Lys	Leu	Pro	Asp	Gln	Pro	Phe	Thr	His	His	Ser	Gln	Glu
		35					40					45			
Gly	Pro	Phe	Pro	Pro	Gly	Arg	Glu	Thr	Ser	Arg	Pro	Ala	Pro	His	Thr
		50				55				60					
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70					75				80	
Pro	Ser	His	His	Ser	Gln	Glu	Gly	Pro	Phe	Pro	Pro	Gly	Glu	Lys	Leu
				85					90					95	
Pro	Asp														

<210> 2747

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 2747

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 120

agggccccgg cagggttcgcc caagggctgc ttcgcttgcg tgtccaagcc ccctgccctg
 180
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 240
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 300
 gcctgcaagc acctagccga gaagaagacg atgaccaacc ccacgaccgt catcgaggtc
 360
 taccgggaca ccaccgaggt gaacgactat tacctgtggt ccatcttcaa cttcgtctac
 420
 ctcaacttct gctgcctggg cttcatcgcc ttggcctact ccctcaaagt gcgagacaag
 480
 aagcttctca atgacctgaa tggagccgtg gaggatgcaa agacggccccg gctgttcaac
 540
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 600
 cccctaccg actactaagg cccgccaggc acggctgctg gcggagacaa gcactgagac
 660
 atgtttattc tcatgggtccc tgaaacgcag gatcccatga gggtggggca gggcagggct
 720
 tcttgctctg gggccccctt gagctgtgaa ctgggcagca aggccatcag aagctgagta
 780
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 840
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 tgtgtccctg ccctcacgtg ccccttccca ggctcctggg gccccttgga cctgacacct
 960
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 1100

<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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Glu	Pro	Arg	Pro	Ala	Pro	Arg	Thr	Ala	Pro	Arg	Lys	Pro	Glu	Ser	Pro
			20					25				30			
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35					40				45				
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50					55				60					
Ala	Pro	Ala	Pro	Glu	Pro	Ser	Ala	Ser	Pro	Pro	Met	Ala	Pro	Thr	Leu
65					70					75				80	
Phe	Pro	Met	Glu	Ser	Lys	Ser	Ser	Lys	Thr	Asp	Ser	Val	Arg	Ala	Ala
			85					90					95		
Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

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      100      105      110
Asn Pro Thr Thr Val Ile Glu Val Tyr Pro Asp Thr Thr Glu Val Asn
      115      120      125
Asp Tyr Tyr Leu Trp Ser Ile Phe Asn Phe Val Tyr Leu Asn Phe Cys
      130      135      140
Cys Leu Gly Phe Ile Ala Leu Ala Tyr Ser Leu Lys Val Arg Asp Lys
      145      150      155      160
Lys Leu Leu Asn Asp Leu Asn Gly Ala Val Glu Asp Ala Lys Thr Ala
      165      170      175
Arg Leu Phe Asn Ile Thr Ser Ser Ala Leu Ala Ala Ser Cys Ile Ile
      180      185      190
Leu Val Phe Ile Phe Leu Arg Tyr Pro Leu Thr Asp Tyr
      195      200      205

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<210> 2749

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 2749

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120
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180
gcccgtgcag gccacacccat gaacacctcc ccaggcacgg tgggcagtga cccgggtcatc
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300
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<210> 2756

<211> 550

<212> PRT

<213> Homo sapiens

<400> 2756

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Phe Ala Glu Thr Met Glu Leu His Thr Phe Leu Thr Lys Ile Lys Ser
      35           40           45
Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
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Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
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Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
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Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
      100          105          110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
      115          120          125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
      130          135          140
Ala His Glu Ile Ile Leu Asp Phe Ile Arg Ser Arg Pro Pro Leu Asn
145          150          155          160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
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Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
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Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
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Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
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Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
225          230          235          240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
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Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
      260          265          270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
      275          280          285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
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Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
305          310          315          320
Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
      325          330          335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
      340          345          350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
      355          360          365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
      370          375          380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
385          390          395          400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
      405          410          415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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 450 455 460
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 465 470 475 480
 Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
 485 490 495
 Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
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 Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
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<210> 2757
 <211> 449
 <212> DNA
 <213> Homo sapiens

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<210> 2758
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2758
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 Gln Asp His Ser Ser Leu Asn Pro Gln Lys Trp His Cys Val Asp Cys
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 Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

<210> 2761
 <211> 922
 <212> DNA
 <213> Homo sapiens

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 120
 ccataactg agggcaataa agagccagat aagacctggg tgaaaaaggg agagcccctc
 180
 ccggtaaaac tgaactcttc tacagaagca aatgtgatta aagaggctct agactcctct
 240
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 420
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 480
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<210> 2762
 <211> 307
 <212> PRT
 <213> Homo sapiens

<400> 2762
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 20 25 30
 Ser Ser Leu Ser Gln Ala Gly Asp Pro Ile Thr Glu Gly Asn Lys Glu
 35 40 45
 Pro Asp Lys Thr Trp Val Lys Lys Gly Glu Pro Leu Pro Val Lys Leu

50	55	60
Asn Ser Ser Thr Glu Ala	Asn Val Ile Lys Glu Ala Leu Asp Ser Ser	
65	70	75
Leu Glu Ser Thr Leu Asp Asn Ser Cys Gln Gly Ala Gln Met Asp Asn		80
	85	90
Lys Ser Glu Val Gln Leu Trp Leu Leu Lys Arg Ile Gln Val Pro Ile		95
	100	105
Glu Asp Ile Leu Pro Ser Lys Glu Glu Lys Ser Lys Thr Pro Pro Met		110
	115	120
Phe Leu Cys Ile Lys Val Gly Lys Pro Met Arg Lys Ser Phe Ala Thr		125
	130	135
His Thr Ala Ala Met Val Gln Gln Tyr Gly Lys Arg Arg Lys Gln Pro		140
	145	150
Glu Tyr Trp Phe Ala Val Pro Arg Glu Arg Val Asp His Leu Tyr Thr		155
	165	170
Phe Phe Val Gln Trp Ser Pro Asp Val Tyr Gly Lys Asp Ala Lys Glu		175
	180	185
Gln Gly Phe Val Val Val Glu Lys Glu Glu Leu Asn Met Ile Asp Asn		190
	195	200
Phe Phe Ser Glu Pro Thr Thr Lys Ser Trp Glu Ile Ile Thr Val Glu		205
	210	215
Glu Ala Lys Arg Arg Lys Ser Thr Cys Ser Tyr Tyr Glu Asp Glu Asp		220
	225	230
Glu Glu Val Leu Pro Val Leu Arg Pro Pro Arg Ala Phe Trp Glu Asn		235
	245	250
Lys Pro Leu Asn Arg Trp Ala Arg Pro Phe Pro Ala Arg Val Gln Gly		255
	260	265
Tyr Pro Trp Arg Leu Ala Tyr Ser Thr Leu Glu His Gly Thr Ser Leu		270
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Lys Thr Leu Tyr Arg Lys Ser Ala Ser Leu Asp Ser Pro Val Leu Leu		285
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Val Ile Lys		300
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<210> 2763

<211> 2210

<212> DNA

<213> Homo sapiens

<400> 2763

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caaacagtcc agtcctgcag accacacagg gtacatctag agggttctac ttgcatcacc
180

cacacttcca ctctgtgaa acaactgtct tgggcatgag aagggccagg ataggccagg
240

tgaatggcag gctgccaac aacccaatc ccaaaccaac ctcccaggcc atgggcccac
300

gtccctgcag gaagatgcta ataggtacaa caggtagaac atgtagacac aaacatctag
360

tttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt cagtgcctta
420

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720
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 2210

<210> 2764
 <211> 423
 <212> PRT
 <213> Homo sapiens

<400> 2764
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 Val Ala Ser Gly Pro Val Val Gly Gly Arg Lys Lys Val Arg Gly Pro
 35 40 45
 Glu Gln Ile Lys Gln Glu Val Glu Ser Glu Glu Glu Lys Pro Asp Arg
 50 55 60
 Met Asp Ile Asp Ser Glu Asp Thr Asp Ser Asn Thr Ser Leu Gln Thr
 65 70 75 80
 Arg Ala Arg Glu Lys Arg Lys Pro Gln Leu Glu Lys Asp Thr Lys Pro
 85 90 95
 Lys Glu Pro Arg Tyr Thr Pro Val Ser Ile Tyr Glu Glu Lys Leu Leu
 100 105 110
 Leu Lys Arg Leu Glu Ala Cys Pro Gly Ala Val Ala Met Thr Pro Glu
 115 120 125
 Ala Arg Arg Leu Lys Arg Lys Leu Ile Val Arg Gln Ala Lys Arg Asp
 130 135 140
 Arg Gly Leu Pro Leu Phe Asp Leu Asp Gln Val Val Asn Ala Ala Leu
 145 150 155 160
 Leu Leu Val Asp Gly Ile Tyr Gly Ala Lys Glu Gly Gly Ile Ser Arg
 165 170 175
 Leu Pro Ala Gly Gln Ala Thr Tyr Arg Thr Thr Cys Gln Asp Phe Arg
 180 185 190
 Ile Leu Asp Arg Tyr Gln Thr Ser Leu Pro Ser Arg Lys Gly Phe Arg
 195 200 205
 His Gln Thr Thr Lys Phe Leu Tyr Arg Leu Val Gly Ser Glu Asp Met
 210 215 220
 Ala Val Asp Gln Ser Ile Val Ser Pro Tyr Thr Ser Arg Ile Leu Lys
 225 230 235 240
 Pro Tyr Ile Arg Arg Asp Tyr Glu Thr Lys Pro Pro Lys Leu Gln Leu
 245 250 255
 Leu Ser Gln Ile Arg Ser His Leu His Arg Ser Asp Pro His Trp Thr
 260 265 270
 Pro Glu Pro Asp Ala Pro Leu Asp Tyr Cys Tyr Val Arg Pro Asn His
 275 280 285
 Ile Pro Thr Ile Asn Ser Met Cys Gln Glu Phe Phe Trp Pro Gly Ile
 290 295 300
 Asp Leu Ser Glu Cys Leu Gln Tyr Pro Asp Phe Ser Val Val Val Leu
 305 310 315 320
 Tyr Lys Lys Val Ile Ile Ala Phe Gly Phe Met Val Pro Asp Val Lys

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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
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Phe Phe Leu Arg Leu Arg Arg
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<210> 2765
 <211> 582
 <212> DNA
 <213> Homo sapiens

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480
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582

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<210> 2766
 <211> 100
 <212> PRT
 <213> Homo sapiens

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<400> 2766
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Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
20          25          30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
35          40          45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50	55	60
Leu Ser Gly Gln Trp Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro		
65	70	75
Ser Leu Ala Leu Cys Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro		80
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Glu Ala Gly Ser		95
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<210> 2767

<211> 1202

<212> DNA

<213> Homo sapiens

<400> 2767

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ag
1202

<210> 2768
<211> 282
<212> PRT
<213> Homo sapiens

<400> 2768
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20 25 30
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
35 40 45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
50 55 60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65 70 75 80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
85 90 95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
100 105 110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
115 120 125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
130 135 140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145 150 155 160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
165 170 175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
180 185 190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
195 200 205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
210 215 220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225 230 235 240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
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Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
260 265 270
Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
275 280

<210> 2769
<211> 1286
<212> DNA
<213> Homo sapiens

<400> 2769
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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<212> DNA

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Arg	His	Gly	Ser	Lys	Ile	Trp	Val	Asn	Glu	Glu	Thr	Lys	Leu	Val	Tyr		
		580					585					590					
Phe	Gln	Gly	Thr	Lys	Asp	Thr	Pro	Leu	Glu	His	His	Leu	Tyr	Val	Val		
	595					600					605						
Ser	Tyr	Glu	Ala	Ala	Gly	Glu	Ile	Val	Arg	Leu	Thr	Thr	Pro	Gly	Phe		

610	615	620
Ser His Ser Cys Ser Met Ser Gln Asn Phe Asp Met Phe Val Ser His		
625	630	635
Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		640
	645	650
Gly Pro Asp Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
	660	665
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
	675	680
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
	690	700
Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		
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<210> 2781

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 2781

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1020

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 1140
 aattatatcc aaaatgagcc aaagtgtcga gagaccttct atgacacatt agtgtcacat
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<210> 2782

<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

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			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
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Phe	Ser	Ser	Arg	Phe	Lys	Asn	Leu	Ala	His	Gln	His	Gln	Ser	Met	Phe
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Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
65					70				75					80	
Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
			85					90						95	
Tyr	Glu	Ala	Leu	His	Gly	Pro	Pro	Lys	Lys	Ile	Leu	Val	Glu	Gly	Ala
			100					105					110		
Asn	Ala	Ala	Leu	Leu	Asp	Ile	Asp	Phe	Gly	Thr	Tyr	Pro	Phe	Val	Thr
		115					120					125			
Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
	130					135					140				
Pro	Gln	Asn	Ile	Gly	Asp	Val	Tyr	Gly	Val	Val	Lys	Ala	Tyr	Thr	Thr
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Arg	Val	Gly	Ile	Gly	Ala	Phe	Pro	Thr	Glu	Gln	Ile	Asn	Glu	Ile	Gly
			165					170						175	
Gly	Leu	Leu	Gln	Thr	Arg	Gly	His	Glu	Trp	Gly	Val	Thr	Thr	Gly	Arg
			180					185					190		
Lys	Arg	Arg	Cys	Gly	Trp	Leu	Asp	Leu	Met	Ile	Leu	Arg	Tyr	Ala	His
	195					200						205			
Met	Val	Asn	Gly	Phe	Thr	Ala	Leu	Ala	Leu	Thr	Lys	Leu	Asp	Ile	Leu
	210					215					220				
Asp	Val	Leu	Gly	Glu	Val	Lys	Val	Gly	Val	Ser	Tyr	Lys	Leu	Asn	Gly
225					230				235					240	
Lys	Arg	Ile	Pro	Tyr	Phe	Pro	Ala	Asn	Gln	Glu	Met	Leu	Gln	Lys	Val
			245					250						255	
Glu	Val	Glu	Tyr	Glu	Thr	Leu	Pro	Gly	Trp	Lys	Ala	Asp	Thr	Thr	Gly
		260						265					270		
Ala	Arg	Arg	Trp	Glu	Asp	Leu	Pro	Pro	Gln	Ala	Gln	Asn	Tyr	Ile	Arg
	275						280					285			
Phe	Val	Glu	Asn	His	Val	Gly	Val	Ala	Val	Lys	Trp	Val	Gly	Val	Gly

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<210> 2783
 <211> 2376
 <212> DNA
 <213> Homo sapiens

<400> 2783
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 180
 aacatagact catcacagta tgaagattca ctgagagaga tgttcaccat tcatgcctac
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 420
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 480
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 720
 aagaagacca tggagaatgt ggatagtctg gataagctgg agtgtagatt caagctgaat
 780
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 1320

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 2280
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<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
		20					25					30			
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
		35				40					45				
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50				55					60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65				70				75					80		
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

				85					90					95			
Gln	His	Ile	Val	Ser	Asp	Glu	Ile	Cys	Val	Gln	Val	Thr	Asp	Leu	Tyr		
			100					105					110				
Leu	Ala	Glu	Asn	Asn	Asn	Gly	Ala	Thr	Gly	Gly	Gln	Leu	Asn	Thr	Gln		
		115					120					125					
Asn	Ser	Arg	Ser	Leu	Leu	Glu	Ser	Thr	Tyr	Gln	Arg	Lys	Ala	Glu	Gln		
		130				135					140						
Leu	Met	Ser	Asp	Glu	Asn	Cys	Phe	Lys	Leu	Met	Phe	Ile	Gln	Ser	Gln		
145					150				155						160		
Gly	Gln	Val	Gln	Leu	Thr	Ile	Glu	Leu	Leu	Asp	Thr	Glu	Glu	Glu	Asn		
			165					170							175		
Ser	Asp	Asp	Pro	Val	Glu	Ala	Glu	Arg	Trp	Ser	Asp	Tyr	Val	Glu	Arg		
			180					185					190				
Tyr	Met	Asn	Ser	Asp	Thr	Thr	Ser	Pro	Glu	Leu	Arg	Glu	His	Leu	Ala		
		195					200					205					
Gln	Lys	Pro	Val	Phe	Leu	Pro	Arg	Asn	Leu	Arg	Arg	Ile	Arg	Lys	Cys		
	210					215					220						
Gln	Arg	Gly	Arg	Glu	Gln	Gln	Glu	Lys	Glu	Gly	Lys	Glu	Gly	Asn	Ser		
225					230				235						240		
Lys	Lys	Thr	Met	Glu	Asn	Val	Asp	Ser	Leu	Asp	Lys	Leu	Glu	Cys	Arg		
			245					250						255			
Phe	Lys	Leu	Asn	Ser	Tyr	Lys	Met	Val	Tyr	Val	Ile	Lys	Ser	Glu	Asp		
		260					265						270				
Tyr	Met	Tyr	Arg	Arg	Thr	Ala	Leu	Leu	Arg	Ala	His	Gln	Ser	His	Glu		
	275						280					285					
Arg	Val	Ser	Lys	Arg	Leu	His	Gln	Arg	Phe	Gln	Ala	Trp	Val	Asp	Lys		
	290					295					300						
Trp	Thr	Lys	Glu	His	Val	Pro	Arg	Glu	Met	Ala	Ala	Glu	Thr	Ser	Lys		
305					310					315					320		
Trp	Leu	Met	Gly	Glu	Gly	Leu	Glu	Gly	Leu	Val	Pro	Cys	Thr	Thr	Thr		
			325					330						335			
Cys	Asp	Thr	Glu	Thr	Leu	His	Phe	Val	Ser	Ile	Asn	Lys	Tyr	Arg	Val		
		340						345					350				
Lys	Tyr	Gly	Thr	Val	Phe	Lys	Ala	Pro									
		355					360										

<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

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120
tgatgagatc ctcttcaca tcttgagtca cgtccccagc acagatctga ttctgaacgt
180
ccggcggtacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt
240
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
300
cggccgggag atccagcagc tgagcatggc tggctgctac tggctgcctg gctccaccgt
360

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ggaacacgtg gcccgctgcc cgcagcctgg tgaaggtgaa cctctcgggc tgccacctca
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 480
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<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 20 25 30
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu
 35 40 45
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
 100 105 110
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly
 115 120 125
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala
 130 135 140
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
 145 150 155

<210> 2787
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 2787
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 120
 acaatgcaca gacatggcag tatecttctg gtgggaggga gtcaccattt gctctgcct
 180
 gccctctgct ggggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg
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 299

<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

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          20          25          30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
          35          40          45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
          50          55          60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65          70          75          80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
          85          90          95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca
180
ccctggactg cagcctctgc acttcttctt tcattgcact gtccactcct gcgggcagag
240
ccaggcgctg ggtcacggcc ggccggctcc ccacccacac cccaggggct ccctcctgtc
300
cccagggaga ggcagagcca gaagactcag gcccaggcct ctgccacccc cgctgcctgc
360
ctggcgctgg ccagaggtct caggctatgc cgcctaagta cgtcggggcg ggtggctctg
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492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
          20          25          30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
          35          40          45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50	55	60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala		
65	70	75
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg		80
	85	90
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys		95
	100	105
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly		110
	115	120
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg		125
	130	135
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<210> 2791

<211> 1271

<212> DNA

<213> Homo sapiens

<400> 2791

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120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
240
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300
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360
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480
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540
taatgttcac ttcactctgt gcttcttttc ctagatgtga actatgaaga ctttactttc
600
accataccag atgtagagga ctcaagtcag agaccagatc agggacccca gagacctcct
660
cctgaaggac tctacctag accccctggg gatagtggta accaagatga tggtcctcag
720
cagagaccac caaaaccagg aggccatcac cgccatcctc cccacctcc ttttcaaaat
780
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960
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1020
attaatagca tgcggaagaa agaatggttt gcatccacat ggagagtgtg ccatttagag
1080

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<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

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			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35					40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50					55				60					
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
			85					90					95		
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
			100					105					110		
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
			115				120								

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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120
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cagatcttaa gtagtgatat ttctcttttg tctgccccta ttgtaagtgc agatggaaca
420
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480

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 600
 cgaagagttg tcgtgggtccc tcaggcacca gagtttcacc ctggtagtca cacagttctc
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 847

<210> 2794
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2794
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 20 25 30
 Gln Val Ile Leu Val Gln Val Asn Pro Gly Glu Ala Phe Thr Ile Arg
 35 40 45
 Arg Glu Asp Gly Gln Phe Gln Cys Ile Thr Gly Pro Ala Gln Val Pro
 50 55 60
 Met Met Ser Pro Asn Gly Ser Val Pro Pro Ile Tyr Val Pro Pro Gly
 65 70 75 80
 Tyr Ala Pro Gln Val Ile Glu Asp Asn Gly Val Arg Arg Val Val Val
 85 90 95
 Val Pro Gln Ala Pro Glu Phe His Pro Gly Ser His Thr Val Leu His
 100 105 110
 Arg Ser Pro His Pro Pro Leu Pro Gly Phe Ile Pro Val Pro Thr Met
 115 120 125
 Met Pro Pro His His Val Ile Cys Thr His Pro
 130 135

<210> 2795
 <211> 1022
 <212> DNA
 <213> Homo sapiens

<400> 2795
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 120
 gcctggcagc tgctgggtgt ggaatagttc tggatgccaa tctcctccag gctcctgcgg
 180
 atgtcaccca gcatggaaag gacatcttga gtgggcacca cccctgctc gccaccag
 240

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 420
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 480
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 1022

<210> 2796

<211> 56

<212> PRT

<213> Homo sapiens

<400> 2796

Ala	Ser	Ala	Ala	Cys	Pro	Ser	Arg	Ser	Cys	Trp	Leu	Arg	Ser	Ser	Cys
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Pro	Lys	Val	Ala	Glu	Glu	Gly	Val	Ser	Ser	Met	Ser	Pro	Gly	Ala	Ser
			20					25					30		
Gly	Glu	Glu	Ala	Glu	Val	Leu	Glu	Pro	Arg	Gly	Ser	Ser	Ser	Gly	Cys
		35				40						45			
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	50					55									

<210> 2797

<211> 475

<212> DNA

<213> Homo sapiens

<400> 2797

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 120

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 180
 ggctttctcca ccgtgcttgg catctacttc ttcctggccg aggtgggtgct gctctgctgg
 240
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 300
 cacacgggct ggcaggccgc cctgggtgtcc accatcatca tggtgcccgt gggcctcatc
 360
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 475

<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
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Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
			20					25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
			100					105					110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120					125				
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
145					150					155					

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 180
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 240

ttcatggcca gcccgtaaa gcctgagatc tccagggagc aggccatcgc gctcctcaag
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360
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420
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480
aagggctgcc ccaatgagcc aaacttcgga tcgctgtctg ccctggtcta ccagcactcc
540
atcatcccat tggccctgcc ttgcaagctg gtcattccaa accgagacct cacagatgaa
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660
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720
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780
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840
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1320
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1860

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 2580
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 2700
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 2760
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 2820
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 2872

<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35					40					45			
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50					55				60					
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70					75					80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90					95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

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<210> 2801
<211> 549
<212> DNA
<213> Homo sapiens
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<210> 2802

<211> 151
 <212> PRT
 <213> Homo sapiens

<400> 2802
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 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
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 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
 35 40 45
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50 55 60
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65 70 75 80
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85 90 95
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
 100 105 110
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
 115 120 125
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
 130 135 140
 Lys Arg Lys Gly Val Glu Phe
 145 150

<210> 2803
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2803
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 ccgccagccg tagggtgtgt gctgtccggg ctcacgggga ccctgtctcc gagtcgttcg
 180
 tgcagcgtgt gtaccagccc ttcctcacca cctgcgacgg gcaccgggccc tgcagcacct
 240
 accgcaatat gccagccgcc atgccggaac ggaggagct gtgtccagcc tggccgctgc
 300
 cgctgccttg caggatggcg ggggtgacct tgccagtcag atgtggacna gtgcaatgaa
 360
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 420
 actggcccca ctgcacagcc tggcctcgca ggcactgga
 459

<210> 2804
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2804

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Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
          20           25           30
Val Arg Gly Met Thr Asp Ser Pro Pro Pro Ala Val Gly Cys Val Leu
          35           40           45
Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
          50           55           60
Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
65          70          75          80
Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
          85          90          95
Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
          100          105          110
Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
          115          120          125
Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
          130          135          140
Ala Gln Pro Gly Leu Ala Gly Thr Gly
145          150

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<210> 2805

<211> 771

<212> DNA

<213> Homo sapiens

<400> 2805

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120
gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
180
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240
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300
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540
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660
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771

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<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165 170 175
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180 185

<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 480

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 660
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 780
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 960
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 aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa
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<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
		35				40					45				
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50		55		60	
Thr	Asp	Ser	Leu	Val	Ser
65		70		75	
Cys	Glu	Pro	Leu	Val	Ala
		85		90	
Ala	Met	Arg	Arg	Cys	Val
		100		105	
Cys	Glu	Phe	Pro	Pro	His
		115		120	
Pro	Pro	Ser	Leu	Gly	Leu
		130		135	
Leu	Glu	Lys	Arg	Val	Ser
145		150		155	
Ser	Ser	Thr	Tyr	Val	Gln
		165		170	
Ser	Val	Pro	Leu	Pro	His
		180		185	
Gln	Ser	Pro	Phe	Gln	Ala
		195		200	
Ser	Leu	Gln	Leu	Phe	Trp
		210		215	
Gln	Gly	Lys	Cys	Thr	Arg
225		230		235	
Ile	Ser	Gln	Ala	Ile	Ile
		245		250	
Ala	Val	Val	Thr	Cys	Arg
		260		265	
Cys	Pro	Arg	Glu	Trp	Ala
		275		280	
Arg	Val	Val	Leu	Gln	Phe
		290		295	
Ala	Arg	Val	Asp	Glu	Pro
305		310		315	
Ser	Pro	Ser	Val	Leu	Arg
		325		330	
Lys	Pro	Ser	Lys	Ile	Val
		340		345	
Gln	Cys	Gly	Glu	Leu	Pro
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<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

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 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

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<210> 2814

<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814

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          35          40          45
Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
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Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
65          70          75          80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
          85          90          95
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
          100          105          110
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
          115          120          125
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
          130          135          140
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
145          150          155          160
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
          165          170          175
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
          180          185          190
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
          195          200          205
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
          210          215          220
Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
225          230          235          240
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
          245          250          255
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
          260          265          270
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
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Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
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His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
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Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
          340          345          350
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          355          360          365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
          370          375          380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
385          390          395          400
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Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

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<210> 2815

<211> 1421

<212> DNA

<213> Homo sapiens

<400> 2815

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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
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Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
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Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
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Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
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Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
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Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
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Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
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Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
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Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
			180					185					190		
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Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
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<210> 2817

<211> 219

<212> DNA

<213> Homo sapiens

<400> 2817

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<210> 2818

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2818

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			20					25					30		
Pro	Gly	Ala	Ser	Leu	Gly	Pro	Gly	Val	Leu	Leu	Arg	Ala	Glu	Phe	His
		35					40					45			
Gln	His	Gln	His	Thr	His	Gln	His	Thr	His	Gln	His	Thr	His	Gln	His
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Gln	His	Thr	Phe	Ala	Pro	Phe	Thr	Arg							
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<210> 2819

<211> 730

<212> DNA

<213> Homo sapiens

<400> 2819

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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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			20					25					30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
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Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
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Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
				85					90					95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
			100					105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
	115						120					125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
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Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
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Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165						170					175	
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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Thr	Glu	Pro													
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<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His
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Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln
				85					90					95	
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
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Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
		115					120					125			
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	130					135					140				
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Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu
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Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser
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Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly
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			260					265					270		
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser
		275					280					285			
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	290					295					300				
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His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser
				325					330					335	
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Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
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Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
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<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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<210> 2824

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<212> PRT

<213> Homo sapiens

<400> 2824

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          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
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<212> DNA
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<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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			20					25					30		
Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
		35					40					45			
Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
	50					55					60				
Glu	Ser	Pro	Leu	Thr	Leu	Ala	Ala	Cys	Gly	Gly	His	Val	Glu	Leu	Ala
65					70					75					80
Ala	Leu	Leu	Ile	Glu	Arg	Gly	Ala	Asn	Leu	Glu	Glu	Val	Asn	Asp	Glu
			85					90						95	
Gly	Tyr	Thr	Pro	Leu	Met	Glu	Ala	Ala	Arg	Glu	Gly	His	Glu	Glu	Met
			100					105					110		
Val	Ala	Leu	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln
		115					120					125			
Lys	Lys	Leu	Lys	Lys	Leu	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe
	130					135					140				
Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
145					150					155					160
Gly	Cys	Ser	Thr	Pro	Leu	Met	Glu	Ala	Ala	Gln	Glu	Gly	His	Leu	Glu
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Leu	Val	Lys	Tyr	Leu	Leu	Ala	Ala	Gly	Ala	Asn	Val	His	Ala	Thr	Thr
			180					185					190		
Ala	Thr	Gly	Asp	Thr	Ala	Leu	Thr	Tyr	Ala	Cys	Glu	Asn	Gly	His	Thr
		195				200						205			
Asp	Val	Ala	Asp	Val	Leu	Leu	Gln	Ala	Gly	Ala	Asp	Leu	Asp	Lys	Gln
	210					215					220				
Glu	Asp	Met	Lys	Thr	Ile	Leu	Glu	Gly	Ile	Asp	Pro	Ala	Lys	His	Leu
225					230					235					240
Glu	His	Glu	Ser	Glu	Gly	Gly	Arg	Thr	Pro	Leu	Met	Lys	Ala	Ala	Arg
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Ala	Gly	His	Val	Cys	Thr	Val	Gln	Phe	Leu	Ile	Ser	Lys	Gly	Ala	Asn
			260					265					270		
Val	Asn	Arg	Thr	Thr	Ala	Asn	Asn	Asp	His	Thr	Val	Leu	Ser	Leu	Ala
		275				280						285			
Cys	Ala	Gly	Gly	His	Leu	Ala	Val	Val	Glu	Leu	Leu	Leu	Ala	His	Gly
	290					295					300				
Ala	Asp	Pro	Thr	His	Arg	Leu	Lys	Asp	Gly	Ser	Thr	Met	Leu	Ile	Glu
305					310					315					320
Ala	Ala	Lys	Gly	Gly	His	Thr	Ser	Val	Val	Cys	Tyr	Leu	Leu	Asp	Tyr
				325					330					335	
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          370          375          380
Val Ala Thr Thr Leu Pro Ile Arg Asn Lys Ala Ala Ser Lys Gln Lys
385          390          395          400
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile
          405          410          415
Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu
          420          425          430
Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln
          435          440          445
Leu Gln Ser Leu Glu Leu Ala His Ala Asp Gln Leu Thr Lys Glu Lys
          450          455          460
Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln
465          470          475          480
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 <211> 481
 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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	20	25	30
Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln			
	35	40	45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu			
	50	55	60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu			
65	70	75	80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
	85	90	95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
	100	105	110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
	115	120	125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
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<211> 3648

<212> DNA

<213> Homo sapiens

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<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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2064

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<211> 3986

<212> DNA

<213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 2832
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 Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
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 Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
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 Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
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 Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
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 Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
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 Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
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 Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val
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 Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser
 260 265 270
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 340 345 350
 Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
 355 360 365
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Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu		400
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Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg		415
	420	425
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg		430
	435	440
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile		445
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Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val		460
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His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp		480
	485	490
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val		495
	500	505
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp		510
	515	520
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys		525
	530	535
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr		540
545	550	555
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile		560
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Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu		575
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<211> 420

<212> DNA

<213> Homo sapiens

<400> 2833

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<210> 2834

<211> 117
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 <213> Homo sapiens

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 35 40 45
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
 50 55 60
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
 65 70 75 80
 Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
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<210> 2835
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 <213> Homo sapiens

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<210> 2836

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2836

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Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
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Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
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His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
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Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
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Arg	Tyr	Lys	Ser	Leu	Arg	Phe	Trp	Gly	Ser	Val	Gly	Pro	Ala	Glu	Ser
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Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
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<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

<400> 2837

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<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

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Ala	His	Arg	Gly	Pro	Ser	Ser	Ser	Leu	Asn	Thr	Pro	Gly	Ser	Phe	Arg
				245					250					255	
Arg	Gly	Leu	Asp	Asp	Xaa	His	Arg	Gly	Thr	Pro	Leu	Thr	Pro	Ala	Ala
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Arg	Ile	Ser	Ala	Leu	Asn	Ile	Val	Gly	Asp	Leu	Leu	Arg	Lys	Val	Gly
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Ser	Pro	Asn	Arg	Thr	Gly	Gly	Pro	Ala	Ser	Gly	Arg	Ser	Ser	Lys	Asn
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Arg	Asp	Gly	Gly	Glu	Arg	Arg	Pro	Ser	Ser	Thr	Ser	Val	Pro	Leu	Gly
			325						330					335	
Asp	Lys	Gly	Ser	Val	Pro	Ser	Asn	Lys	Pro	Leu	Ala	Gly	Gly	Glu	Asn
		340					345					350			
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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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 420

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 <212> PRT
 <213> Homo sapiens

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 Ala Thr Asn Gly Asp Pro Arg Asn Ser Cys Ser Leu His Tyr Ile His
 35 40 45
 Pro Tyr Gln Pro Asn Glu Tyr Leu Lys Ala Leu Val Ala Val Gly Glu
 50 55 60
 Ile Cys Gln Asp Tyr Asp Ser Asp Lys Met Phe Pro Ala Phe Gly Phe
 65 70 75 80
 Gly Ala Arg Ile Pro Pro Glu Tyr Thr Val Ser His Asp Phe Ala Ile
 85 90 95
 Asn Phe Asn Glu Asp Asn Pro Glu Cys Ala Gly Ile Gln Gly Val Val
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 Glu Ala Tyr Gln Ser Cys Leu Pro Lys Leu Gln Leu Tyr Gly Pro Thr
 115 120 125
 Asn Ile Ala Pro Ile Ile Gln Lys Val Ala Lys Ser Ala Ser Glu Glu
 130 135 140
 Thr Asn Thr Lys Glu Ala Ser Gln Tyr Phe Ile Leu Leu Ile Leu Thr
 145 150 155 160
 Asp Gly Val Ile Thr Asp Met Gly Asp Thr Arg Glu Ala Ile Val His
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<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln	35	40	45	
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr		50	55	60	
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys	65	70	75	80
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr	85	90	95	
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val	100	105	110	
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His	115	120	125	
Gln	Val	Leu	Thr	Glu	Gln	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe	130	135	140	
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr	145	150	155	160
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp	165	170	175	
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala	180	185	190	
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu	195	200	205	
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile	210	215	220	
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp	225	230	235	240
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe	245	250	255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro	260	265	270	
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val	275	280	285	
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala				

290		295		300											
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Ser	Thr	Pro	Gln	Val	Arg	Gly	Met	His	Thr	Ile	Ile	Arg	Asp	Lys	Glu
				325						330				335	
Thr	Ser	Arg	Asp	Glu	Phe	Ile	Phe	Tyr	Ser	Lys	Arg	Leu	Met	Arg	Leu
			340					345					350		
Leu	Ile	Glu	His	Ala	Leu	Ser	Phe	Leu	Pro	Phe	Gln	Asp	Cys	Val	Val
		355					360					365			
Gln	Thr	Pro	Gln	Gly	Gln	Asp	Tyr	Ala	Gly	Lys	Cys	Tyr	Ala	Gly	Lys
		370				375					380				
Gln	Ile	Thr	Gly	Val	Ser	Ile	Leu	Arg	Ala	Gly	Glu	Thr	Met	Glu	Pro
385					390					395					400
Ala	Leu	Arg	Ala	Val	Cys	Lys	Asp	Val	Arg	Ile	Gly	Thr	Ile	Leu	Ile
				405					410					415	
Gln	Thr	Asn	Gln	Leu	Thr	Gly	Glu	Pro	Glu	Leu	His	Tyr	Leu	Arg	Leu
		420					425						430		
Pro	Lys	Asp	Ile	Ser	Asp	Asp	His	Val	Ile	Leu	Met	Asp	Cys	Thr	Val
		435				440						445			
Ser	Thr	Gly	Ala	Ala	Ala	Met	Met	Ala	Val	Arg	Val	Leu	Leu	Asp	His
		450				455					460				
Asp	Val	Pro	Glu	Asp	Lys	Ile	Phe	Leu	Leu	Ser	Leu	Leu	Met	Ala	Glu
465					470				475					480	
Met	Gly	Val	His	Ser	Val	Ala	Tyr	Ala	Phe	Pro	Arg	Val	Arg	Ile	Ile
			485				490							495	
Thr	Thr	Ala	Val	Asp	Lys	Arg	Val	Asn	Asp	Leu	Phe	Arg	Ile	Ile	Pro
		500					505						510		
Gly	Ile	Gly	Asn	Phe	Gly	Asp	Arg	Tyr	Phe	Gly	Thr	Asp	Ala	Val	Pro
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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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<211> 165
<212> PRT
<213> Homo sapiens

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35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
130 135 140
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
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Gln Ala Ser Thr Pro
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<210> 2845
<211> 934
<212> DNA
<213> Homo sapiens

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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
		50				55					60				
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
			85						90					95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105					110		
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120					125			
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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<210> 2848

<211> 856

<212> PRT

<213> Homo sapiens

<400> 2848

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 35 40 45
 Val Gly Pro Pro Ser Leu Asp Ala Gln Pro Asn Ser Lys Thr Glu Arg
 50 55 60
 Ser Lys Ser Tyr Asp Glu Gly Leu Asp Asp Tyr Arg Glu Asp Ala Lys

65					70					75					80
Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
			100					105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
			115				120					125			
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
			130				135				140				
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
145					150				155						160
Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Gln	Pro	Ile	Ser	
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Glu	Val	Leu	Leu	Lys	His	Arg	Phe	Val	Leu	Arg	Glu	Arg	Pro	Pro	Thr	
		275					280					285				
Val	Ile	Met	Asp	Leu	Ile	Gln	Arg	Thr	Lys	Asp	Ala	Val	Arg	Glu	Leu	
	290					295					300					
Asp	Asn	Leu	Gln	Tyr	Arg	Lys	Met	Lys	Lys	Ile	Leu	Phe	Gln	Glu	Ala	
305					310					315					320	
Pro	Asn	Gly	Pro	Gly	Ala	Glu	Ala	Pro	Glu	Glu	Glu	Glu	Glu	Ala	Glu	
				325					330					335		
Pro	Tyr	Met	His	Arg	Ala	Gly	Thr	Leu	Thr	Ser	Leu	Glu	Ser	Ser	His	
			340					345					350			
Ser	Val	Pro	Ser	Met	Ser	Ile	Ser	Ala	Ser	Ser	Gln	Ser	Ser	Ser	Val	
		355					360					365				
Asn	Ser	Leu	Ala	Asp	Ala	Ser	Asp	Asn	Glu	Glu	Glu	Glu	Glu	Glu	Glu	
	370					375					380					
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Pro	Glu	Ala	Arg	Glu	Met	Ala	
385					390					395					400	
Met	Met	Gln	Glu	Gly	Glu	His	Thr	Val	Thr	Ser	His	Ser	Ser	Ile	Ile	
				405					410					415		
His	Arg	Leu	Pro	Gly	Ser	Asp	Asn	Leu	Tyr	Asp	Asp	Pro	Tyr	Gln	Pro	
			420					425					430			
Glu	Ile	Thr	Pro	Ser	Pro	Leu	Gln	Pro	Pro	Ala	Ala	Pro	Ala	Pro	Thr	
		435					440					445				
Ser	Thr	Thr	Ser	Ser	Ala	Arg	Arg	Arg	Ala	Tyr	Cys	Arg	Asn	Arg	Asp	
	450					455					460					
His	Phe	Ala	Thr	Ile	Arg	Thr	Ala	Ser	Leu	Val	Ser	Arg	Gln	Ile	Gln	
465					470					475					480	
Glu	His	Glu	Gln	Asp	Ser	Ala	Leu	Arg	Glu	Gln	Leu	Ser	Gly	Tyr	Lys	
				485					490					495		
Arg	Met	Arg	Arg	Gln	His	Gln	Lys	Gln	Leu	Leu	Ala	Leu	Glu	Ser	Arg	
			500					505					510			
Leu	Arg	Gly	Glu	Arg	Glu	Glu	His	Ser	Ala	Arg	Leu	Gln	Arg	Glu	Leu	
		515					520					525				
Glu	Ala	Gln	Arg	Ala	Gly	Phe	Gly	Ala	Glu	Ala	Glu	Lys	Leu	Ala	Arg	
	530					535					540					
Arg	His	Gln	Ala	Ile	Gly	Glu	Lys	Glu	Ala	Arg	Ala	Ala	Gln	Ala	Glu	
545					550					555					560	
Glu	Arg	Lys	Phe	Gln	Gln	His	Ile	Leu	Gly	Gln	Gln	Lys	Lys	Glu	Leu	
				565					570					575		
Ala	Ala	Leu	Leu	Glu	Ala	Gln	Lys	Arg	Thr	Tyr	Lys	Leu	Arg	Lys	Glu	
			580					585					590			
Gln	Leu	Lys	Glu	Glu	Leu	Gln	Glu	Asn	Pro	Ser	Thr	Pro	Lys	Arg	Glu	
		595					600									

675					680					685						
Glu	Leu	Glu	Leu	Arg	Gln	Leu	Gln	Ala	Val	Gln	Arg	Thr	Arg	Ala	Glu	
690					695					700						
Leu	Thr	Arg	Leu	Gln	His	Gln	Thr	Glu	Leu	Gly	Asn	Gln	Leu	Glu	Tyr	
705					710					715					720	
Asn	Lys	Arg	Arg	Glu	Gln	Glu	Leu	Arg	Gln	Lys	His	Ala	Ala	Gln	Val	
725					730					735						
Arg	Gln	Gln	Pro	Lys	Ser	Leu	Lys	Val	Arg	Ala	Gly	Gln	Arg	Pro	Pro	
740					745					750						
Gly	Leu	Pro	Leu	Pro	Ile	Pro	Gly	Ala	Leu	Gly	Pro	Pro	Asn	Thr	Gly	
755					760					765						
Thr	Pro	Ile	Glu	Gln	Gln	Pro	Cys	Ser	Pro	Gly	Gln	Glu	Ala	Val	Leu	
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Asp	Gln	Arg	Met	Leu	Gly	Glu	Glu	Glu	Glu	Ala	Val	Gly	Glu	Arg	Arg	
785					790					795					800	
Ile	Leu	Gly	Lys	Glu	Gly	Ala	Thr	Leu	Glu	Pro	Lys	Gln	Gln	Arg	Ile	
805					810					815						
Leu	Gly	Glu	Glu	Ser	Gly	Ala	Pro	Ser	Pro	Ser	Pro	Gln	Lys	His	Gly	
820					825					830						
Ser	Leu	Val	Asp	Glu	Glu	Val	Trp	Gly	Leu	Pro	Glu	Glu	Ile	Glu	Glu	
835					840					845						
Leu	Arg	Val	Pro	Ser	Leu	Val	Pro	Gln	Glu	Arg	Ser	Ile	Val	Gly	Gln	
850					855					860						
Glu	Glu	Ala	Gly	Thr	Trp	Ser	Leu	Trp	Gly	Lys	Glu	Asp	Glu	Ser	Leu	
865					870					875					880	
Leu	Asp	Glu	Glu	Phe	Glu	Leu	Gly	Trp	Val	Gln	Gly	Pro	Ala	Leu	Thr	
885					890					895						
Pro	Val	Pro	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly	Ala	Pro	Ile	Gly		
900					905					910						
Thr	Pro	Arg	Asp	Pro	Gly	Asp	Gly	Cys	Pro	Ser	Pro	Asp	Ile	Pro	Pro	
915					920					925						
Glu	Pro	Pro	Pro	Thr	His	Leu	Arg	Pro	Cys	Pro	Ala	Ser	Gln	Leu	Pro	
930					935					940						
Gly	Leu	Leu	Ser	His	Gly	Leu	Leu	Ala	Gly	Leu	Ser	Phe	Ala	Val	Gly	
945					950					955					960	
Ser	Ser	Ser	Gly	Leu	Leu	Pro	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu	
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Leu	Ala	Ala	Gln	Gly	Gly	Gly	Gly	Leu	Gln	Ala	Ala	Leu	Leu	Ala	Leu	
980					985					990						
Glu	Val	Gly	Leu	Val	Gly	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Leu	Cys	Thr	
995					1000					1005						
Ala	Leu	His	Leu	Pro	Ser	Ser	Leu	Phe	Leu	Leu	Leu	Ala	Gln	Gly	Thr	
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Ala	Leu	Gly	Ala	Val	Leu	Gly	Leu	Ser	Trp	Arg	Arg	Gly	Leu	Met	Gly	
1025					1030					1035					1040	
Val	Pro	Leu	Gly	Leu	Gly	Ala	Ala	Trp	Leu	Leu	Ala	Trp	Pro	Gly	Leu	
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Ala	Leu	Pro	Leu	Val	Ala	Met	Ala	Ala	Gly	Gly	Arg	Trp	Val	Arg	Gln	
1060					1065					1070						
Gln	Gly	Pro	Arg	Val	Arg	Arg	Gly	Ile	Ser	Arg	Leu	Trp	Leu	Arg	Val	
1075					1080					1085						
Leu	Leu	Arg	Leu	Ser	Pro	Met	Ala	Phe	Arg	Ala	Leu	Gln	Gly	Cys	Gly	
1090					1095					1100						
Ala	Val	Gly	Asp	Arg	Gly	Leu	Phe	Ala	Leu	Tyr	Pro	Lys	Thr	Asn	Lys	


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1105          1110          1115          1120
Asp Gly Phe Arg Ser Arg Leu Pro Val Pro Gly Pro Arg Arg Arg Asn
          1125          1130          1135
Pro Arg Thr Thr Gln His Pro Leu Ala Leu Leu Ala Arg Val Trp Val
          1140          1145          1150
Leu Cys Lys Gly Trp Asn Trp Arg Leu Ala Arg Ala Ser Gln Gly Leu
          1155          1160          1165
Ala Ser His Leu Pro Pro Trp Ala Ile His Thr Leu Ala Ser Trp Gly
          1170          1175          1180
Leu Leu Arg Gly Glu Arg Pro Thr Arg Ile Pro Arg Leu Leu Pro Arg
1185          1190          1195          1200
Ser Gln Arg Gln Leu Gly Pro Pro Ala Ser His Gln Pro Leu Pro Gly
          1205          1210          1215
Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro
          1220          1225          1230
Pro Trp Arg
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<210> 2855
<211> 1676
<212> DNA
<213> Homo sapiens

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120
gaggaagcca tctttgacac cctttgcacc gatgacagct ctgaagaggc aaagacactc
180
acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtcctcagag
240
agcagcgccct cttccgacgg ccccatcca gtcacacccc cgtcacggggc ctcagagagc
300
agcgccctctt ccgaaggccc ccatccagtc atcaccccgt cacggggcctc agagagcagc
360
gcctcttccg acggccccca tccagtcac accccgcatc ggtccccggg atctgatgtc
420
actctcctcg ctgaagccct ggtgactgtc acaaacatcg aggttattaa ttgcagcatc
480
acagaaatag aaacaacgac ttccagcatc cctggggcct cagacacaga tctcatcccc
540
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600
aagcaaaacc acacatcact gaggtcanca gcctctgccg agaccctgtc cacagccggc
660
accacagagt cagctgcacc tgatgccacg gttgggaccc cactccccac taacagcacc
720
atagaaagag aagtgacagc acccagggcc acgaccctca gtggagctct ggtcacagtt
780
agcaggaatc ccctggaaga aacctcagcc ctctctgttg agacaccaag ttacgtcaaa
840
gtctcaggag cagctccggt ctccatagag gctgggtcag cagtggggcaa aacaacttcc
900

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tttgctggga gctctgcttc ctctacagc ccctcggaag ccgccctcaa gaacttcacc
 960
 ccttcagaga caccgaccat ggacatcgca accaaggggc ctttccccac cagcagggac
 1020
 cctcttcctt ctgtccctcc gactacaacc aacagcagcc gagggacgaa cagcacctta
 1080
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 1140
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 1200
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 1260
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 1320
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 1380
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 1440
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 1500
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 1560
 gtgtccttgg actcaccttg gcacatgttc tgtgtttcag taaagagaga cctgatcacc
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 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

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Thr	Ser	Ala	Ala	Ser	Gly	Ser	Pro	Glu	Gly	Ala	Arg	Met	Thr	Thr	Val
		20						25					30		
Gln	Thr	Ile	Thr	Gly	Ser	Asp	Pro	Glu	Glu	Ala	Ile	Phe	Asp	Thr	Leu
	35					40						45			
Cys	Thr	Asp	Asp	Ser	Ser	Glu	Glu	Ala	Lys	Thr	Leu	Thr	Met	Asp	Ile
	50				55					60					
Leu	Thr	Leu	Ala	His	Thr	Ser	Thr	Glu	Ala	Lys	Gly	Leu	Ser	Ser	Glu
65					70					75					80
Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr	Pro	Ser	Arg
				85					90					95	
Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro	Val	Ile	Thr
			100					105					110		
Pro	Ser	Arg	Ala	Ser	Glu	Ser	Ser	Ala	Ser	Ser	Asp	Gly	Pro	His	Pro
		115					120					125			
Val	Ile	Thr	Pro	Ser	Trp	Ser	Pro	Gly	Ser	Asp	Val	Thr	Leu	Leu	Ala
	130					135					140				
Glu	Ala	Leu	Val	Thr	Val	Thr	Asn	Ile	Glu	Val	Ile	Asn	Cys	Ser	Ile
145					150					155					160
Thr	Glu	Ile	Glu	Thr	Thr	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Ser	Asp	Thr

				165					170					175			
Asp	Leu	Ile	Pro	Thr	Glu	Gly	Val	Lys	Ala	Ser	Ser	Thr	Ser	Asp	Pro		
			180					185					190				
Pro	Ala	Leu	Pro	Asp	Ser	Xaa	Leu	Lys	Gln	Asn	His	Thr	Ser	Leu	Arg		
		195					200					205					
Ser	Xaa	Ala	Ser	Ala	Glu	Thr	Leu	Ser	Thr	Ala	Gly	Thr	Thr	Glu	Ser		
	210					215					220						
Ala	Ala	Pro	Asp	Ala	Thr	Val	Gly	Thr	Pro	Leu	Pro	Thr	Asn	Ser	Thr		
225				230					235						240		
Ile	Glu	Arg	Glu	Val	Thr	Ala	Pro	Arg	Ala	Thr	Thr	Leu	Ser	Gly	Ala		
			245					250						255			
Leu	Val	Thr	Val	Ser	Arg	Asn	Pro	Leu	Glu	Glu	Thr	Ser	Ala	Leu	Ser		
		260					265					270					
Val	Glu	Thr	Pro	Ser	Tyr	Val	Lys	Val	Ser	Gly	Ala	Ala	Pro	Val	Ser		
	275					280					285						
Ile	Glu	Ala	Gly	Ser	Ala	Val	Gly	Lys	Thr	Thr	Ser	Phe	Ala	Gly	Ser		
	290					295					300						
Ser	Ala	Ser	Ser	Tyr	Ser	Pro	Ser	Glu	Ala	Ala	Leu	Lys	Asn	Phe	Thr		
305				310				315						320			
Pro	Ser	Glu	Thr	Pro	Thr	Met	Asp	Ile	Ala	Thr	Lys	Gly	Pro	Phe	Pro		
			325					330						335			
Thr	Ser	Arg	Asp	Pro	Leu	Pro	Ser	Val	Pro	Pro	Thr	Thr	Thr	Asn	Ser		
		340					345						350				
Ser	Arg	Gly	Thr	Asn	Ser	Thr	Leu	Ala	Lys	Ile	Thr	Thr	Ser	Ala	Lys		
	355					360						365					
Thr	Thr	Met	Lys	Pro	Pro	Thr	Ala	Thr	Pro	Thr	Thr	Ala	Arg	Thr	Arg		
	370					375					380						
Pro	Thr	Thr	Asp	Val	Ser	Ala	Gly	Glu	Asn	Gly	Gly	Ser	Ser	Ser	Cys		
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Gly																	

<210> 2857

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2857

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 120
 aggctagcca gagggtaatt acacaggtgt aggccggcgg ggcgggcgga gggctcggga
 180
 ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttccatacc
 240
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 300
 gaagcagaag ccgtagaatc agcggcgagc ctgttgaaag aaccacagg tgcatttcac
 360
 agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
 420
 attttgaata tgatgcagag gagttcttgg tctctttggc cttgctgata acagaaggac
 480

gaacacctga atgttctgta aaaggctgaa cagaaagctt tcattgccct ccagcacagt
 540
 cttgttacct agtaactacc aaacatgaat gtagtgacaa gctggcccag tgccgccaag
 600
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 660
 aaatgatgct actaccagac tgctgctaca gcgatgatgg gccaccaca gaggggaattg
 720
 atctaaatga tcctgcgatt aagcaagatg cattattatt agaaagatgg atcttggagc
 780
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 840
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 900
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 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1320
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 1380
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 1440
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 1560
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<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

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Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35				40					45				
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

50		55		60
Leu Ala Gln Cys Arg	Gln Ala Arg Arg Thr Arg	Ser Glu Val Thr Leu		
65	70	75	80	
Leu Trp Lys Asn Asn	Leu Pro Ile Met Val Glu Met Met	Leu Leu Pro		
	85	90	95	
Asp Cys Cys Tyr Ser	Asp Asp Gly Pro Thr Thr	Glu Gly Ile Asp Leu		
	100	105	110	
Asn Asp Pro Ala Ile	Lys Gln Asp Ala Leu Leu Leu	Glu Arg Trp Ile		
	115	120	125	
Leu Glu Pro Val Pro	Arg Gln Asn Gly Asp Arg Phe	Ile Glu Glu Lys		
	130	135	140	
Thr Leu Leu Leu Ala	Val Arg Ser Phe Val Phe Ser	Gln Leu Ser		
145	150	155	160	
Ala Trp Leu Ser Val	Ser His Gly Ala Ile Pro Arg	Asn Ile Leu Tyr		
	165	170	175	
Arg Ile Ser Ala Ala	Asp Val Asp Leu Gln Trp Asn	Phe Ser Gln Thr		
	180	185	190	
Pro Ile Glu His Val	Phe Pro Val Pro Asn Val Ser	His Asn Val Ala		
	195	200	205	
Leu Lys Val Ser Gly	Gln Ser Leu Ala Gln Thr Ile			
	210	215	220	

<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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180
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300
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420
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480
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540
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600
gagacacctg gggcagtctc tcccaaccag cccaccttc ctcagcctca tttgcctcac
660
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780

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<210> 2860
<211> 343
<212> PRT
<213> Homo sapiens
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2098

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305              310              315              320
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
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Ala Val Gly Ser Phe Asn Ser
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<210> 2861
 <211> 756
 <212> DNA
 <213> Homo sapiens

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<400> 2861
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120
aatgggaaca agggccctcc agttgggtca aggataagca tgccaaccac aaagcctcgt
180
ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
240
aaaaaactag attctactca gactacacat tcttcaagtc ttattgctgg tcacacaggg
300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg ccttattgct
360
ggttcttcca ttcagaaccc taaagtttct ttagaacctt tgccagccag gctacttcaa
420
caaggacttc agaggtcaag ccagattcac acttcttcct cttcacagac ccatgtctcc
480
tcttcttccc aagcccaaat tgctgcctct tctcatgctc tgggaacatc cgaggcccaa
540
gatgcttctt cgttaacaca agtaacaaag gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatcccaga ccaaccccg tctgaagtta
660
agtaataatc cccaactctc ctgttcctcc tcaactatta agacttcaga taagccactt
720
atgtaccgcc ttcccttata taccoccttc acgcgt
756

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<210> 2862
 <211> 252
 <212> PRT
 <213> Homo sapiens

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<400> 2862
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Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20      25      30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35      40      45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

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50	55	60
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Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr		95
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Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys		110
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Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln		125
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Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser		140
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Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr		160
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Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His		175
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Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr		190
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Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro		205
	210	215
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu		220
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<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

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Ser	Gly	Arg	Ile	Val	Trp	Ser	Pro	Ala	Val	Pro	Gly	Ile	Pro	Val	Arg
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Ser	Ser	Ser	Leu	Pro	Leu	Phe	Ser	Asp	Ala	Met	Pro	Ala	Pro	Thr	Gln
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Ile	Pro	Gln	Ser	Arg	Leu	Arg	Tyr	Thr	Pro	His	Pro	Ala	Tyr	Ala	Thr
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Thr	Arg	Gly	Met	Leu	Leu	Gly	Val	Phe	Asp	Gly	His	Ala	Gly	Cys	Ala
		195					200					205			
Cys	Ser	Gln	Ala	Val	Ser	Glu	Arg	Leu	Phe	Tyr	Tyr	Ile	Ala	Val	Ser
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<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

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<211> 134

<212> PRT

<213> Homo sapiens

<400> 2866

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		35					40					45			
Arg	Asp	Ile	Ser	Ser	Tyr	Lys	Trp	Lys	Thr	Asp	Ser	Ile	Ile	Gly	Pro
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Ile	Arg	Leu	Lys	Arg	Asp	Arg	Ser	Ala	Ser	Gly	Asn	Ser	Gly	Phe	Gln
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His	Leu	Phe	Ser	Phe	Met	Val	Leu	Ala	Leu	Asn	Val	Val	Thr	Val	Ala
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Thr	Ile	Thr	Val	Arg	His	Phe	Val	Asn	Gln	Arg	Ala	Asp	Tyr	Lys	Tyr
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<210> 2867

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2867

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 <213> Homo sapiens

<400> 2868
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 35 40 45
 Pro Arg Gly Ile Ile Leu His Pro Gly His His Pro Ala Pro Arg Gln
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 His Cys Cys His Ser Arg Leu Val Ala Ala Ala Pro Arg Pro Cys Trp
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 Trp Cys Trp Arg

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 <213> Homo sapiens

<400> 2869
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<212> DNA

<213> Homo sapiens

<400> 2871

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<210> 2872

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<212> PRT

<213> Homo sapiens

<400> 2872

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Ile Ser Pro Asp Ala Phe Phe Gln Ile Asn Thr Ala Gly Ala Glu Met
      35             40             45
Leu Tyr Trp Thr Val Gly Glu Leu Thr Gly Val Asn Ser Asp Thr Ile
      50             55             60
Leu Leu Asp Ile Cys Cys Gly Thr Gly Val Ile Gly Leu Pro Leu Ala
65             70             75             80
Gln His Thr Ser Arg Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val
      85             90             95
Glu Asp Ala Arg Trp Thr Ala Ala Phe Asn Gly Ile Thr Asn Ser Glu
      100            105            110
Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser
      115            120            125
Lys Glu Asp Gly Gln Ser Ile Val Ala Val Val Asn Pro Ala Arg Ala

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<210> 2873
 <211> 1187
 <212> DNA
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 <211> 248
 <212> PRT

<213> Homo sapiens

<400> 2874

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 35 40 45
 Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
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 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
 65 70 75 80
 Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
 85 90 95
 Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
 100 105 110
 Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
 115 120 125
 Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
 130 135 140
 Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
 145 150 155 160
 Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
 165 170 175
 Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
 180 185 190
 Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
 195 200 205
 Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
 210 215 220
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<210> 2875

<211> 593

<212> DNA

<213> Homo sapiens

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 Pro Gly Pro Lys Thr Val Thr Leu Lys Arg Thr Ser Gln Gly Phe Gly
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 Phe Thr Leu Arg His Phe Ile Val Tyr Pro Pro Glu Ser Ala Ile Gln
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 Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg
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 Asn Arg Leu Glu Pro Met Asp Thr Ile Phe Val Lys Gln Val Lys Glu
 100 105 110
 Gly Gly Pro Ala Phe Glu Ala Gly Leu Cys Thr Gly Asp Arg Ile Ile
 115 120 125
 Lys Val Asn Gly Glu Ser Val Ile Gly Lys Thr Tyr Ser Gln Val Ile
 130 135 140
 Ala Leu Ile Gln Asn Ser Asp Thr Thr Leu Glu Leu Ser Val Met Pro
 145 150 155 160
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1800

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 1921

<210> 2878
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 2878
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 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp
 35 40 45
 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr
 50 55 60
 Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser
 65 70 75 80
 Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp
 85 90 95
 Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe
 100 105 110
 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly
 115 120 125
 Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val Leu
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 Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe
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 Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly
 165 170 175
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 180 185 190
 Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val
 195 200 205
 Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
 210 215 220
 Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val
 225 230 235 240
 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
 245 250 255
 Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr Asn Ile Leu
 260 265 270
 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr
 275 280 285
 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln
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<210> 2879
<211> 1352
<212> DNA
<213> Homo sapiens
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 1020
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<210> 2880

<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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Leu	Ile	Gln	Pro	Ala	Asn	His	Val	Leu	Pro	Ala	Ser	Phe	Gly	Asn	Ser
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Asp	Trp	Tyr	Leu	Val	Thr	Gly	Ser	Ser	Leu	Thr	Cys	Thr	Pro	Gly	Pro
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65					70					75					80
Pro	Val	Xaa	Asp	Lys	Tyr	Ala	Pro	Lys	Leu	Asp	Ser	Pro	Tyr	Phe	Arg
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His	Ser	Ser	Val	Ser	Phe	Phe	Pro	Ser	Phe	Pro	Pro	Ala	Ile	Pro	Gly
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Leu	Pro	Thr	Leu	Leu	Pro	His	Pro	Gly	Pro	Phe	Gly	Ser	Leu	Gln	Gly
		115					120					125			
Ala	Phe	Gln	Pro	Lys	Thr	Ser	Ser	Pro	Ile	Glu	Val	Ala	Arg	Arg	Ala
	130					135					140				
Gly	Ala	Val	His	Thr	Leu	Leu	Gln	Lys	Ala	Pro	Gly	Val	Ser	Asp	Pro
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Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val
			165					170						175	
Gln	Ile	Ala	Trp	Gln	Ile	Tyr	Arg	His	Gln	Gln	Lys	Ile	Lys	Glu	Met
		180					185						190		
Gln	Leu	Asp	Pro	His	Lys	Leu	Glu	Val	Gly	Ala	Lys	Leu	Asp	Leu	Phe
	195						200					205			
Gly	Arg	Pro	Pro	Ala	Pro	Gly	Val	Phe	Ala	Gly	Phe	His	Tyr	Pro	Gln
	210					215					220				
Asp	Leu	Ala	Arg	Pro	Leu	Phe	Pro	Ser	Thr	Gly	Ala	Ala	His	Pro	Ala
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<210> 2881
<211> 3021
<212> DNA
<213> Homo sapiens
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 1020
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 1080
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 1140
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 1200
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 2520

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<210> 2882
 <211> 96
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
 50 55 60
 Pro Leu Asp Val Ser Gly Gln Gly Ser Gly Gly Cys Ser Phe Asp Lys
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<210> 2883
 <211> 516
 <212> DNA
 <213> Homo sapiens

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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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			20					25					30		
Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
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	50					55					60				
Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
65					70				75					80	
Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
				85					90					95	
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		100						105					110		
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
		115					120					125			
Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
	130					135					140				
Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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 420
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<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
			35				40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
			50			55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65				70					75					80	
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85					90					95		
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Gln	Val	Glu	Gly	Thr	Ile	
			100					105				110			
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
			115			120						125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
			130			135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145				150					155					160	
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170					175		
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
			180					185				190			
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Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
			210			215					220				
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

225		230		235		240									
Val	Asp	Thr	Glu	Glu	Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu
				245					250					255	
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<210> 2887

<211> 1945

<212> DNA

<213> Homo sapiens

<400> 2887

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1260

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 1945

<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

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			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
			35				40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
			50			55					60				
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70					75					80
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
				85					90				95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
			100					105					110		
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
			115				120					125			
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
			130			135					140				
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145					150					155					160
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
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<400> 2890
Val His Leu Pro Glu Val Gln Leu Pro Lys Val Ser Glu Ile Arg Leu

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      20             25             30
Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
      35             40             45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
      50             55             60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
      65             70             75             80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
      85             90             95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
      100            105            110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
      115            120            125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
      130            135            140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
      145            150            155            160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
      165            170            175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
      180            185            190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
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<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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180
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480
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<210> 2892

<211> 90
 <212> PRT
 <213> Homo sapiens

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 Arg Leu Cys Arg Ala Leu Ser Lys Thr Pro Leu Gln His Gln Leu His
 20 25 30
 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
 35 40 45
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
 50 55 60
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
 65 70 75 80
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
 85 90

<210> 2893
 <211> 2270
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 240
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<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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			20					25					30				
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe		
		35					40					45					
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val		
	50					55					60						
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His		
65					70					75					80		
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser		
			85						90					95			
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn		
			100					105					110				
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly		
		115					120					125					
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser		
	130					135					140						
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro		
145					150					155					160		
Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His		
				165					170					175			
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys		
		180						185					190				
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe		
	195						200					205					
Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe		
	210					215				220							
Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys		
225					230				235						240		
Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met		
				245					250					255			
Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu		
			260					265					270				
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu		
	275						280					285					
Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val	Leu	Glu		
	290					295					300						
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys		
305					310					315					320		
Gly	Lys	Lys	His	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu		
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Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg		
			340					345					350				
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser	Ser	Leu		
		355						360				365					
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro		
	370					375					380						
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys		
385					390					395					400		
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu		
				405					410					415			
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys		
			420					425					430				
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro		

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          435              440              445
Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
          450              455              460
Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg
465              470              475              480
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<210> 2895
 <211> 697
 <212> DNA
 <213> Homo sapiens

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<400> 2895
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<210> 2896
 <211> 174
 <212> PRT
 <213> Homo sapiens

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<400> 2896
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          20          25          30
Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala
          35          40          45
Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu
          50          55          60
Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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65		70		75		80									
Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Pro	Ser
				85					90					95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe	Arg
			100					105					110		
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg	Arg
		115					120					125			
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro	Ala
	130					135					140				
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro	Arg
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Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala		
			165					170							

<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

Met	Asn	Val	Glu	Ile	Lys	Cys	Lys	Asp	Arg	Thr	Gly	Ser	Ile	Thr	Leu
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			20					25					30		
Asn	Glu	Cys	Val	Gln	Cys	Glu	Phe	Asn	Phe	Ile	Asn	Thr	Gly	Lys	Phe
		35					40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
		50				55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65					70					75				80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85						90					95	
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
			100					105					110		
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
		115					120					125			
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
		130				135					140				
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145				150					155					160	
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
			180					185					190		
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
		195				200						205			
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg Ile Val Lys Leu Gly	
225	230	235
Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr Val Ser Ile Met Asn	240
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser Ile Leu Phe Thr Ile	
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr Leu Ala Pro Phe His Asn	
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys Leu Glu Val Ile Phe Ala	
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu Glu Val Phe Met Glu Cys	
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu Ser Gly Cys Cys Gln Ala	320
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile Pro Phe Gly Pro Val Val	
340	345	350
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu Met Leu Asn Thr Gly Asp	
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys Lys Phe Glu Pro His Phe	
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr Ser Gly Met Glu Val Ser	
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val Gly Lys Glu Ser Leu Cys	400
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly Ser Pro Leu Ser Leu Thr	
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala Val Lys Glu Val Val Asn	
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr Gln Thr Ile Leu Leu Ser	
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His Pro Ile Phe Glu Gly Glu	
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu Glu Ala His Gln Gln Asn	480
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg Thr Met Asn Leu Glu Asn	
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro Leu Pro Asp Gly Thr Gly	
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu Leu Pro Lys Ala Val Ala	
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr Pro Tyr Thr Glu Leu Leu	
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln Arg Phe Arg Val Ile Val	
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu Ser Ile Thr Met Lys Gly	
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser Lys Lys Asp Tyr Lys Leu	
595	600	605
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr Ala Ala Lys Val Ile Phe	
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr Tyr Asn Val Ser Phe Arg	
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile Glu Met Val Thr Pro Val	640

				645					650					655			
Arg	Gln	Val	Ala	Ser	Ala	Ser	Ile	Lys	Leu	Glu	Asn	Pro	Leu	Pro	Tyr		
			660					665					670				
Ser	Val	Thr	Phe	Ser	Thr	Glu	Cys	Arg	Met	Pro	Asp	Ile	Ala	Leu	Pro		
		675					680					685					
Ser	Gln	Phe	Val	Val	Pro	Ala	Asn	Ser	Glu	Gly	Thr	Phe	Ser	Phe	Glu		
	690					695					700						
Phe	Gln	Pro	Leu	Lys	Ala	Gly	Glu	Thr	Phe	Gly	Arg	Leu	Thr	Leu	His		
705					710					715					720		
Asn	Thr	Asp	Leu	Gly	Tyr	Tyr	Gln	Tyr	Glu	Leu	Tyr	Leu	Lys	Ala	Thr		
			725					730						735			
Pro	Ala	Leu	Pro	Glu	Lys	Pro	Val	His	Phe	Gln	Thr	Val	Leu	Gly	Ser		
		740					745						750				
Ser	Gln	Ile	Leu	Val	Lys	Phe	Ile	Asn	Tyr	Thr	Arg	Gln	Arg	Thr			
	755					760					765						
Glu	Tyr	Tyr	Cys	Arg	Thr	Asp	Cys	Thr	Asp	Phe	His	Ala	Glu	Lys	Leu		
	770					775					780						
Ile	Asn	Ala	Ala	Pro	Gly	Gly	Gln	Gly	Gly	Thr	Glu	Ala	Ser	Val	Glu		
785					790					795					800		
Val	Leu	Phe	Glu	Pro	Ser	His	Leu	Gly	Glu	Thr	Lys	Gly	Ile	Leu	Ile		
			805					810					815				
Leu	Ser	Ser	Leu	Ala	Gly	Gly	Glu	Tyr	Ile	Ile	Pro	Leu	Phe	Gly	Met		
		820					825					830					
Ala	Leu	Pro	Pro	Lys	Pro	Gln	Gly	Pro	Phe	Ser	Ile	Arg	Ala	Gly	Tyr		
	835					840						845					
Ser	Ile	Ile	Ile	Pro	Phe	Lys	Asn	Val	Phe	Tyr	His	Met	Val	Thr	Phe		
	850					855					860						
Ser	Ile	Ile	Val	Asp	Asn	Pro	Ala	Phe	Thr	Ile	Arg	Ala	Gly	Glu	Ser		
865					870					875					880		
Val	Arg	Pro	Lys	Lys	Ile	Asn	Asn	Ile	Thr	Val	Ser	Phe	Glu	Gly	Asn		
			885					890					895				
Pro	Ser	Gly	Ser	Lys	Thr	Pro	Ile	Thr	Thr	Lys	Leu	Thr	Val	Ser	Cys		
		900					905					910					
Pro	Pro	Gly	Glu	Gly	Ser	Glu	Thr	Gly	Val	Lys	Trp	Val	Tyr	Tyr	Leu		
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Lys	Gly	Ile	Thr	Leu													
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<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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180
gactagtctg aattgagaaa tactcccaac aggggcacaa aacgtccccg ggatgatgag
240
gaagaagaac tgaagacacg ccgcaagcaa actgggtactc gagaacgcgg ccgctatcgg
300

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gaagaagaaa tgactgtggt ggaggaagcg gatgatgaca aaaaaaggct gctgcagatt
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 420
 aagaaaatga tcctcacatt tgaaaagaga tcatataaaa accaagaatt gcggattaag
 480
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 720
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 780
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 876

<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

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Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
		20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg
		35				40						45		
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu
	50					55				60				
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met
65					70				75					80
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu
				85					90					95
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp
			100					105					110	
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp
		115				120						125		Thr
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu
	130					135					140			
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu
145					150					155				160
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala
				165					170					175
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			180					185						

<210> 2901

<211> 756

<212> DNA

<213> Homo sapiens

<400> 2901

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 180
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 240
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 360
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 480
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 540
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 720
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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

Thr	Arg	Arg	Arg	Gly	Ala	Phe	Asp	Phe	Phe	Glu	Lys	Gln	Asp	Gln	Val
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Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35				40						45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
	50					55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75					80
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
				85					90					95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115				120						125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu
 145 150 155

<210> 2903
 <211> 542
 <212> DNA
 <213> Homo sapiens

<400> 2903
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 120
 gactcacaga acctcagtgc ctacaacacc cggctcttca aagaggtcga tggagaaggg
 180
 aagccctact acgaggtgcg gctggcttct gtgcttggtc cagagccttc cctggactct
 240
 gaggtgactt ccaagctgaa gagctatgaa ttccggggaa gccctttcca ggtgaccctg
 300
 ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat
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 420
 tccatcgagg cccacaagag gggctccgc ttctggatcc aggacaaagg ccccatcgt
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 540
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 542

<210> 2904
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 2904
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 20 25 30
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr
 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130		135		140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg				
145		150		155
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala				160
	165		170	175
Pro Pro Ser Arg				
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<210> 2905

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2905

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120
ggattcctcc tctgcccagg tttctgctgt ccccccaaaa gaaagacatg tagctgggca
180
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240
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300
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360
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420
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480
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540
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600
taaagcggca cagtcttgag ccttcgctct tcacctaatg cagtgagcgc ccttcgcaaa
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720
gctcctacac cgtaagaccg tgccttcaa tgcaaagggg actgtgcggc gaggcaccga
780
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814

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<210> 2906

<211> 200

<212> PRT

<213> Homo sapiens

<400> 2906

Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp				
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Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala				
	20	25	30	
Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe				

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          35          40          45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
   50          55          60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
65          70          75          80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
          85          90          95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
          100          105          110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
          115          120          125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
          130          135          140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
145          150          155          160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
          165          170          175
Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu
          180          185          190
Leu Leu Asp Val Lys Gly Pro Leu
          195          200

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<210> 2907

<211> 379

<212> DNA

<213> Homo sapiens

<400> 2907

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120
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180
caaaggcaaa ggaattcttc ccttaatggt ggacgggtcct gagactgctc caccctgggc
240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacagcccag
300
gacgacagag cagatgatgg cacgacgccc tcaaaaccca gacaggcctt cttggcttgc
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379

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<210> 2908

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2908

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Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu
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Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
          20          25          30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

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35						40				45					
Gly	Lys	Gly	Ile	Leu	Pro	Leu	Met	Leu	Asp	Gly	Pro	Glu	Thr	Ala	Pro
50						55				60					
Pro	Trp	Ala	His	Tyr	Thr	Gly	Thr	Ser	Phe	Lys	Leu	Pro	Cys	Ser	Thr
65						70				75					
Arg	Arg	Ala	Pro	Gln	Pro	Arg	Thr	Thr	Glu	Gln	Met	Met	Ala	Arg	Arg
85						90				95					
Pro	Gln	Asn	Pro	Asp	Arg	Pro	Ser	Trp	Leu	Ala	Leu	Ala	Asp	Ala	Thr
100						105				110					
Gly															

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<210> 2909
<211> 2420
<212> DNA
<213> Homo sapiens
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<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

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Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
65      70      75      80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
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Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
      100          105          110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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780
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840

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<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
		35					40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
		50				55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65					70					75					80
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85						90					95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150					155					160
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165					170						175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180					185					190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
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Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
		210				215					220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

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                245                250                255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
                260                265                270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
                275                280                285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
                290                295                300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305                310                315                320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
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Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
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<210> 2913

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2913

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<210> 2914

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2914

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20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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<211> 519

<212> PRT

<213> Homo sapiens

<400> 2916

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Ile	Gln	Glu	Val	Glu	Leu	Lys	Ala	Ser	Ala	Ala	Asp	Arg	Glu	Ile	Tyr	35	40	45	
Leu	Leu	Arg	Thr	Ser	Leu	His	Arg	Glu	Arg	Glu	Gln	Ala	Gln	Gln	Leu	50	55	60	
His	Gln	Leu	Leu	Ala	Leu	Lys	Glu	Gln	Glu	His	Arg	Lys	Glu	Leu	Glu	65	70	75	80
Thr	Arg	Glu	Phe	Phe	Thr	Asp	Ala	Asp	Phe	Gln	Asp	Ala	Leu	Ala	Lys	85	90	95	
Glu	Ile	Ala	Lys	Glu	Glu	Lys	Lys	His	Glu	Gln	Met	Ile	Lys	Glu	Tyr	100	105	110	
Gln	Glu	Lys	Ile	Asp	Val	Leu	Ser	Gln	Gln	Tyr	Met	Asp	Leu	Glu	Asn	115	120	125	
Glu	Phe	Arg	Ile	Ala	Leu	Thr	Val	Glu	Ala	Arg	Arg	Phe	Gln	Asp	Val	130	135	140	
Lys	Asp	Gly	Phe	Glu	Asn	Val	Ala	Thr	Glu	Leu	Ala	Lys	Ser	Lys	His	145	150	155	160
Ala	Leu	Ile	Trp	Ala	Gln	Arg	Lys	Glu	Asn	Glu	Ser	Ser	Ser	Leu	Ile	165	170	175	
Lys	Asp	Leu	Thr	Cys	Met	Val	Lys	Glu	Gln	Lys	Thr	Lys	Leu	Ala	Glu	180	185	190	
Val	Ser	Lys	Leu	Lys	Gln	Glu	Thr	Ala	Ala	Asn	Leu	Gln	Asn	Gln	Ile	195	200	205	
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Ile	Glu	Leu	Leu	Lys	His	Glu	Lys	Val	Gln	Leu	Ile	Ser	Glu	Leu	Ala	225	230	235	240
Ala	Lys	Glu	Ser	Leu	Ile	Phe	Gly	Leu	Arg	Thr	Glu	Arg	Lys	Val	Trp	245	250	255	
Gly	His	Glu	Leu	Ala	Gln	Gln	Gly	Ser	Ser	Leu	Ala	Gln	Asn	Arg	Gly				

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 Arg Lys Thr Asn Glu Ser Asp Ser Asp Ala Leu Arg Ile Lys Cys Lys
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 Ile Ile Asp Asp Gln Thr Glu Thr Ile Arg Lys Leu Lys Asp Cys Leu
 305 310 315 320
 Gln Glu Lys Asp Glu His Ile Lys Arg Leu Gln Glu Lys Ile Thr Glu
 325 330 335
 Ile Glu Lys Cys Thr Gln Glu Gln Leu Asp Glu Lys Ser Ser Gln Leu
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 Asp Glu Val Leu Glu Lys Leu Glu Arg His Asn Glu Arg Lys Glu Lys
 355 360 365
 Leu Lys Gln Gln Leu Lys Gly Lys Glu Val Glu Leu Glu Glu Ile Arg
 370 375 380
 Lys Ala Tyr Ser Thr Leu Asn Arg Lys Trp His Asp Lys Gly Glu Leu
 385 390 395 400
 Leu Cys His Leu Glu Thr Gln Val Lys Glu Val Lys Glu Lys Phe Glu
 405 410 415
 Asn Lys Glu Lys Lys Leu Lys Ala Glu Arg Asp Lys Ser Ile Glu Leu
 420 425 430
 Gln Lys Asn Ala Met Glu Lys Leu His Ser Met Asp Asp Ala Phe Lys
 435 440 445
 Arg Gln Val Asp Ala Ile Val Glu Ala His Gln Ala Glu Ile Ala Gln
 450 455 460
 Leu Ala Asn Glu Lys Gln Lys Cys Ile Asp Ser Ala Asn Leu Lys Val
 465 470 475 480
 His Gln Ile Glu Lys Glu Met Arg Glu Leu Glu Glu Thr Cys Lys
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<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
		35					40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
		50				55					60				
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65					70				75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90					95		
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
			100				105						110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
		130				135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145				150					155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185					190			
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
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Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met


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      210              215              220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu
225              230              235              240
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg
      245              250              255
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu
      260              265              270
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu
      275              280              285
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala
      290              295              300
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln
305              310              315              320
Gln Gln Ala Glu Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys
      325              330              335
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser
      340              345              350
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe
      355              360              365
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala
      370              375              380
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu
385              390              395              400
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala
      405              410              415
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp
      420              425              430
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser
      435              440              445
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr
      450              455              460
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg
465              470              475              480
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg
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<210> 2919

<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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300

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<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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		20					25						30		
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
		35				40					45				
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50				55					60					
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65				70					75					80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85				90							95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100				105						110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115					120					125			
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	130					135					140				

<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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1740
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1855

<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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			20					25					30				
Lys	Ile	Val	Arg	Ala	Gln	Gly	Gln	Tyr	Met	Tyr	Asp	Glu	Gln	Gly	Ala		
		35					40					45					
Glu	Tyr	Ile	Asp	Cys	Ile	Ser	Asn	Val	Ala	His	Val	Gly	His	Cys	His		
	50					55					60						
Pro	Leu	Val	Val	Gln	Ala	Ala	His	Glu	Gln	Asn	Gln	Val	Leu	Asn	Thr		
65					70					75					80		
Asn	Ser	Arg	Tyr	Leu	His	Asp	Asn	Ile	Val	Asp	Tyr	Ala	Gln	Arg	Leu		
				85					90					95			
Ser	Glu	Thr	Leu	Pro	Glu	Gln	Leu	Cys	Val	Phe	Tyr	Phe	Leu	Asn	Ser		
			100					105					110				
Gly	Ser	Glu	Ala	Asn	Asp	Leu	Ala	Leu	Arg	Leu	Ala	Arg	His	Tyr	Thr		
		115					120					125					
Gly	His	Gln	Asp	Val	Val	Val	Leu	Asp	His	Ala	Tyr	His	Gly	His	Leu		
	130					135					140						
Ser	Ser	Leu	Ile	Asp	Ile	Ser	Pro	Tyr	Lys	Phe	Arg	Asn	Leu	Asp	Gly		
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Gln	Lys	Glu	Trp	Val	His	Val	Ala	Pro	Leu	Pro	Asp	Thr	Tyr	Arg	Gly		
			165					170						175			
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			180					185					190				
Glu	Val	Lys	Arg	Val	Val	Ser	Ser	Ala	Gln	Glu	Lys	Gly	Arg	Lys	Ile		
		195					200					205					
Ala	Ala	Phe	Phe	Ala	Glu	Ser	Leu	Pro	Ser	Val	Gly	Gly	Gln	Ile	Ile		
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			260				265					270					
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Cys	Val	Ala	Ala	Thr	Gln	Pro	Val	Ala	Arg	Ala	Phe	Glu	Ala	Thr	Gly		
	290					295				300							
Val	Glu	Tyr	Phe	Asn	Thr	Phe	Gly	Gly	Ser	Pro	Val	Ser	Cys	Ala	Val		
305					310					315					320		
Gly	Leu	Ala	Val	Leu	Asn	Val	Leu	Glu	Lys	Glu	Gln	Leu	Gln	Asp	His		
			325					330						335			
Ala	Thr	Ser	Val	Gly	Ser	Phe	Leu	Met	Gln	Leu	Leu	Trp	Gln	Gln	Lys		
			340					345					350				
Ile	Arg	His	Pro	Ile	Val	Gly	Asp	Val	Arg	Gly	Val	Gly	Leu	Phe	Ile		
		355					360					365					
Gly	Val	Asp	Leu	Ile	Lys	Asp	Glu	Ala	Thr	Arg	Thr	Pro	Ala	Thr	Glu		
	370					375					380						
Glu	Ala	Xaa	Val	Tyr	Leu	Val	Ser	Arg	Leu	Lys	Glu	Asn	Tyr	Val	Leu		
385					390					395					400		
Leu	Ser	Thr	Asp	Gly	Pro	Gly	Arg	Asn	Ile	Leu	Lys	Phe	Lys	Pro	Pro		
				405					410					415			
Met	Cys	Phe	Ser	Leu	Asp	Asn	Ala	Arg	Gln	Val	Val	Ala	Lys	Leu	Asp		
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1560

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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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			20					25					30		
Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
		35					40					45			
Glu	Asp	Asp	Asn	Glu	Gly	Leu	His	Ser	Asp	Ser	Arg	Glu	Glu	Lys	Gln
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Asn	Thr	Lys	Ser	Ala	Arg	Glu	Arg	Ala	Gly	Gln	Asp	Met	Gly	Leu	Glu
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His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
				85					90					95	
Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
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Lys	Lys	Thr	Val	Pro	Lys	Lys	Gln	Arg	Asn	Gln	Asp	Arg	Ser	Lys	Ser
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Ala	Ala	Glu	Leu	Glu	Lys	Leu	Met	Pro	Val	Ser	Ala	Gln	Thr	Pro	Lys
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			165						170					175	
Ala	Glu	Glu	Asp	Lys	Glu	Thr	Lys	Arg	Asn	Glu	Ser	Lys	Glu	Lys	Tyr
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Thr	Asp	Thr	Trp	Ala	Tyr	Ile	Ala	Ala	Glu	Gly	Asp	Gln	Glu	Val	Leu				
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<210> 2927

<211> 1084

<212> DNA

<213> Homo sapiens

<400> 2927

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<210> 2928
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 <212> PRT
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

<400> 2930

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Pro Gly Asp Ile Ile Lys Ser Thr Thr Val His Gly Ser Lys Pro Met
65          70          75          80
Met Asp Leu Leu Ile Phe Leu Cys Ala Gln Tyr His Leu Asn Pro Ser
          85          90          95
Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
          100          105          110
Lys Pro Asn Thr Pro Ile Gly Met Leu Glu Val Glu Lys Val Ile Leu
          115          120          125
Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
          130          135          140
Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
145          150          155          160
Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
          165          170          175
Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
          180          185          190
Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
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Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln
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Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
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His Ser Val Val Tyr Asp	Thr Ser Asn Gly Lys	Lys Val Val Asp Ser		
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Ile Arg Asn Leu Lys Ser	Leu Gly Pro Asn Gln	Glu Asn Val Gln Asn		
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610	615	620		
Pro Asp Gln Lys Leu Asn	Gln Pro Ser Ala Glu	Lys Thr Lys Asp Ala		
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Ala Ile Gln Thr Thr Pro	Ser Cys Asn Ser Phe	Asp Gly Lys His Gln		
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675	680	685		
Val Asn Thr Ser Arg Glu	Phe Arg Ser Gln Gly	Thr Leu Ile Ile His		
690	695	700		
Ser Glu Asp Pro Leu Thr	Val Lys Asp Pro Ile	Cys Ala His Gly Asn		
705	710	715	720	
Asp Asp Leu Leu Pro Val	Asp Arg Ile Asp Lys	Asn Ser Thr Ala		
725	730	735		
Ser Tyr Leu Lys Asn Tyr	Pro Leu Tyr Arg Gln	Asp Tyr Asn Pro Lys		
740	745	750		
Pro Lys Pro Ser Asn Glu	Ile Thr Arg Glu Tyr	Ile Pro Lys Ile Gly		
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Met Thr Thr Tyr Lys Ile	Val Pro Pro Lys Ser	Leu Glu Ile Ser Lys		
770	775	780		
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Ala Leu Gly Lys Lys His	Thr His Glu Asn Val	Lys Glu Thr Ala Ile		

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<211> 625

<212> DNA

<213> Homo sapiens

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<210> 2932

<211> 90

<212> PRT

<213> Homo sapiens

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			35				40						45		
Asp	Lys	Pro	Asp	Ser	Val	Leu	Thr	His	His	Val	Pro	Arg	Asn	Leu	Gln
		50				55					60				
Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
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<210> 2933

<211> 688

<212> DNA

<213> Homo sapiens

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<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

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Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
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Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
	50					55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70					75					80
Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
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Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100					105					110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
		115					120				125				
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
		130				135					140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155					160
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
				165					170					175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
			180					185					190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
		195					200					205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
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<210> 2935

<211> 1200

<212> DNA

<213> Homo sapiens

<400> 2935

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360
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420
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1080
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<210> 2936

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2936

Ser Trp Glu Arg Phe Gly His Gly Asp Arg Gly Pro Glu Gly Pro Ala

1		5		10		15										
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		20						25					30			
Val	Lys	Val	Lys	Met	Glu	Lys	Lys	Ser	Thr	Pro	Ser	Arg	Gly	Ser	Ser	
		35					40					45				
Ser	Lys	Ser	Ser	Ser	Arg	Gln	Leu	Ser	Glu	Ser	Phe	Lys	Ser	Lys	Glu	
		50				55					60					
Phe	Val	Ser	Ser	Asp	Glu	Ser	Ser	Ser	Gly	Glu	Asn	Lys	Ser	Lys	Lys	
65					70					75					80	
Lys	Arg	Arg	Arg	Ser	Glu	Asp	Ser	Glu	Glu	Glu	Glu	Leu	Ala	Ser	Thr	
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Pro	Pro	Ser	Ser	Glu	Asp	Ser	Ala	Ser	Gly	Ser	Asp	Glu				
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<210> 2937

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2937

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120
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180
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240
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300
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<210> 2938

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2938

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Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln			
	35	40	45
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val			
	50	55	60
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val			
65	70	75	80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe			
	85	90	95
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
	100	105	110
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His			
	115	120	125
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg			
	130	135	140
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
145	150	155	160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
	165	170	175
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
	180	185	190
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
	195	200	205
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
	210	215	220
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp			
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<210> 2939

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 2939

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240
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300
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360
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420
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480

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720
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2100

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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg	35	40	45	
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys	50	55	60	
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn	65	70	75	80
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro	85	90	95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp	100	105	110	
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly	115	120	125	
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn	130	135	140	
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn	145	150	155	160
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr	165	170	175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu	180	185	190	
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr	195	200	205	
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn	210	215	220	
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg	225	230	235	240
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala	245	250	255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu	260	265	270	
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys				

	275						280					285							
Leu	Thr	Glu	Ala	Phe	Lys	Tyr	Phe	Leu	Gln	Gly	Met	Gly	Tyr	Met	Ala				
	290						295				300								
Ser	Ser	Cys	Met	Thr	Arg	Leu	Ser	Arg	Ser	Arg	Thr	Ala	Ser	Leu	Thr				
305					310				315					320					
Ser	Ala	Ala	Ser	Val	Asp	Gly	Asn	Arg	Ser	Arg	Ser	Arg	Thr	Leu	Ser				
				325				330					335						
Gln	Ser	Ser	Glu	Ser	Gly	Thr	Leu	Ser	Ser	Gly	Pro	Pro	Gly	His	Thr				
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Met	Glu	Val	Ser	Cys															
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<210> 2941

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2941

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<210> 2942

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
 195 200 205
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu
 210 215 220
 Gln Asp Pro Gln Ala
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<210> 2943

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2943

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<210> 2944

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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			20					25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
		50				55					60				
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
65				70						75				80	
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<210> 2945
<211> 3331
<212> DNA
<213> Homo sapiens
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<210> 2946

<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
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Cys	Ser	Phe	Phe	Thr	Trp	Phe	Ser	Asp	His	Ser	Leu	Pro	Glu	Ser	Asp
			405					410						415	
Lys	Ile	Ala	Glu	Ile	Ile	Lys	Glu	Asp	Leu	Trp	Pro	Asn	Pro	Leu	Gln
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Tyr	Tyr	Leu	Leu	Arg	Glu	Gly	Val	Arg	Arg	Ala	Arg	Arg	Arg	Pro	Leu
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<210> 2947

<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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240

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<210> 2948

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
		35					40					45			
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		50				55					60				
Gly	Ile	Val	Pro	Leu	Gln	Gly	Gln	Gly	Glu	Asp	Lys	Arg	Arg	Val	Ala
65				70					75					80	
His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
			100					105					110		
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		130				135					140				
Pro	Thr	Ser	Asp	Gly	Ile	Leu	Val	Ser	Ala	Ala	Gly	Thr	Thr	Val	Lys
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<212> DNA
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<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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			20					25					30		
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Ser	Ile	Leu	Leu	Lys	Phe	Leu	Arg	Pro	Ser	Pro	Asn	Val	Lys	Leu	Glu
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Pro	Leu	Pro	Ala	Glu	Gly	Lys	Phe	Thr	Glu	Ala	Ile	Val	Asp	Ala	Glu
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Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys
			100					105					110		
Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val
		115					120					125			
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Arg	Phe	Tyr	Thr	Ile	Arg	Tyr	Arg	Glu	Lys	Asp	Lys	Glu	Lys	Lys	Trp
				165					170					175	
Ile	Phe	Gln	Ile	Cys	Pro	Ala	Pro	Glu	Thr	Ile	Val	Glu	Asn	Leu	Lys
			180					185					190		
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<210> 2952

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Gly	Ser	Pro	Arg	Glu	Phe	Ile	Tyr	Leu	Asn	Arg	Tyr	Lys	Arg	Ala	Gly	35	40	45	
Glu	Ser	Gln	Asp	Lys	Cys	Thr	Tyr	Thr	Phe	Ile	Val	Pro	Gln	Gln	Arg	50	55	60	
Val	Thr	Gly	Ala	Ile	Cys	Val	Asn	Ser	Lys	Glu	Pro	Glu	Val	Leu	Leu	65	70	75	80
Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu	Leu	Leu	Asn	Asn	Glu	Leu	85	90	95	
Leu	Lys	Gln	Lys	Arg	Gln	Ile	Glu	Thr	Leu	Gln	Gln	Leu	Val	Glu	Val	100	105	110	
Asp	Gly	Gly	Ile	Val	Ser	Glu	Val	Lys	Leu	Leu	Arg	Lys	Glu	Ser	Arg	115	120	125	
Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	Gln	Leu	Leu	His	Glu	130	135	140	
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Glu	Ile	Gln	Ser	Asp	Gln	Asn	Leu	Lys	Val	Leu	Pro	Pro	Pro	Leu	Pro	245	250	255	
Thr	Met	Pro	Thr	Leu	Thr	Ser	Leu	Pro	Ser	Ser	Thr	Asp	Lys	Pro	Ser	260	265	270	
Gly	Pro	Trp	Arg	Asp	Cys	Leu	Gln	Ala	Leu	Glu	Asp	Gly	His	Asp	Thr	275	280	285	
Ser	Ser	Ile	Tyr	Leu	Val	Lys	Pro	Glu	Asn	Thr	Asn	Arg	Leu	Met	Gln	290	295	300	
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          370          375          380
Arg Leu Glu Pro Glu Ser Glu Tyr Tyr Lys Leu Arg Leu Gly Arg Tyr
385          390          395          400
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Thr Thr Leu Asp Arg Asp His Asp Val Tyr Thr Gly Asn Cys Ala His
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Asn Gly Val Trp Tyr Arg Gly Gly His Tyr Arg Ser Arg Tyr Gln Asp
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<212> DNA

<213> Homo sapiens

<400> 2953

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<212> PRT

<213> Homo sapiens

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Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
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 35 40 45
 Ile Asn Ser Tyr Phe Pro Ile Ser His Tyr Lys Gly His Thr Val Leu
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<212> PRT

<213> Homo sapiens

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Ser	Asn	Lys	Ser	Ser	Phe	Asp	Lys	Met	Ile	Glu	Ala	Ile	Lys	Glu
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<210> 2959

<211> 3323

<212> DNA

<213> Homo sapiens

<400> 2959

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<210> 2960

<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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<212> DNA

<213> Homo sapiens

<400> 2961

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Pro Leu Pro Gln Ala Trp Pro Pro Asp Thr Pro Phe Pro Ala Asp Val
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840

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